THE

MEDICAL EXAMINER.

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NOTICE TO CORRESPONDENTS.

Communications and Books for notice should be addressed to the Editor, care of Messrs. Lindsay & Blakiston.

Letters, &c., connected with the *business affairs* of the Journal should be addressed to the Publishers.

Papers for publication must be received *before* the 16th of the month, or they cannot appear in the forthcoming number.

The following Journals have been received in exchange:

American Journal of Medical Science, July.
Medical News and Library, ditto.
New Jersey Medical Reporter, ditto.
New York Journal of Medicine, ditto.
New York Medical Times, ditto.
American Medical Monthly, ditto.
American Medical Gazette, ditto.
Boston Medical and Surgical Journal. (Weekly.)
Buffalo Medical Journal, July.
American Journal of Dental Science, ditto.
Stethoscope, ditto.
Dental News Letter, ditto.
Virginia Medical and Surgical Journal, ditto.
New Hampshire Journal of Medicine, ditto.
Nelson's American Lancet, ditto.
Montreal Medical Chronicle, ditto.
Peninsular Journal of Medicine, ditto.
St. Louis Medical and Surgical Journal, ditto.
Ohio Medical and Surgical Journal, ditto.
Ohio Medical Counsellor. (Weekly.)
North-Western Medical and Surgical Journal, July.
Nashville Journal of Medicine, ditto.
Southern Medical and Surgical Journal, ditto.
Southern Journal of Medical and Physical Science, ditto.
Western Journal of Medicine and Surgery, ditto.
New Orleans Medical and Surgical Journal, ditto.
London Lancet. (Weekly.)
London Medical Times and Gazette, ditto.
Dublin Medical Press, ditto.

BOOKS AND PAMPHLETS RECEIVED.

Bell on Mineral Springs of the United States and Canada.
Lawrance on Cancer. Liston Prize Essay.
A Pocket Formulary. By Thos. S. Powell, M.D.
Reese's Medical Lexicon.
Bedford's Clinical Lectures.
Transactions of the New York State Society.
Review, Opinions, &c., of the Trial of John Hendrickson, Jr.
Annual Announcement of University of Nashville.
Annual Announcement of Pennsylvania College.

The foreign correspondents of the Examiner will please direct their Exchanges, Books for review, and other communications, to the care of Trubner & Co., No. 12 Paternoster Row, London, or Mr. H. Bosange, 21 Bis, Quai Voltaire, Paris.

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THE

MEDICAL EXAMINER.

NEW SERIES.—NO. CXXVIII.—AUGUST, 1855.

ORIGINAL COMMUNICATIONS.

*On Animal Decomposition as the Chief Promotive Cause of Cholera.** By Henry Hartshorne, M.D.

Notwithstanding all that has been said upon the subject, sufficient emphasis does not appear yet to have been placed upon the influence exerted in the propagation of Epidemic Cholera by *animal*, as contrasted with *vegetable* decay and decomposition.

A marked difference evidently exists, in this respect, between Cholera, on the one hand, and, on the other, Autumnal Fever, whose promotive influences are either vegetative or telluric, and Yellow Fever, which seems to require a certain combination of both. In correspondence with this, a striking contrast to yellow fever and its kindred diseases is found in the fact that, in India, Europeans are less subject to the cholera than natives. In the Mauritius, and elsewhere, negro slaves, who are insusceptible of the fevers of the climate, are quite as liable (or from habits of living, more so) as any others, to cholera.†

A few facts may be appropriately given, to demonstrate the position implied in the title of this paper.

*Abstract of a paper read before the Philadelphia County Medical Society, April, 1855.

† Orton on Cholera in India, pp. 450–453.

The Gangetic Delta being the great focus and centre of the disease, certain traits in the usages and circumstances of that locality and its population are found to have a direct bearing upon the subject. Among these may be named, the peculiarity of the inhabitants in disposing of the dead. Only the Mahommedans, in India, and the peers of highest rank, bury their dead. The mass of the people either burn the bodies, or throw them into the water, without any sort of interment. Supposing, even, that the perfect incineration of human corpses would remove all perniciously decomposable matter, there is evidence that the way in which it is done, or not done, must rather aggravate the evil.* I have heard the incompleteness of the burning described by an eye-witness. But large numbers of the poorer classes are constantly being thrown, after death, into the Ganges and its tributaries; that river being held to be a sacred stream —the gateway to heaven. A traveller saw twenty bodies thus disposed of in one morning before breakfast! At Allahabad, at the junction of the Ganges and Jumna, many persons drown themselves, as devotees; and others are often drowned by the pressure of crowds immersing themselves in the sacred spot.† But a still greater mortality attends the worship of Juggernauth; the annual average of pilgrims to whose temple is said to be 120,000. Thousands of these poor wretches die from famine, fatigue and exposure, during the journey, and are left to rot. In half an acre, 150 bodies have been counted.‡ One writer (Asiatic Journal), asserts that he saw 300 unburied bodies within five miles. Lieut. Colonel Forest§ met with "half a mile of human skulls upon a bend of the river."

Add, then, to these facts, that the Ganges yearly overflows its banks, from one to two hundred miles in some places. The efflux of such an inundation, in the dry season, must expose a quantity of piscine and other animal matter to putrefaction, perhaps nowhere else to be seen. From the geological formation of the Delta, Sir Charles Lyell || observes, that "it is easy to per-

* Stocqueler, Handbook of India, p. 366.
† Ibid, p. 407.
† Ibid, p. 508.
§ Tour along the Ganges and Jumna.
|| Geology, vol. iv., p. 359.

ceive that both animal and vegetable remains must continually be precipitated into the flood, and sometimes become imbedded in the sediment which subsides in the delta."

S. Rogers, F.R.S., a British army surgeon, in his report on cholera in the Madras army, gives the following kindred facts:—

"The Coom river nearly encircles the village of Chintandrepett. This river was made a privy of by hundreds of natives daily; and when the monsoon was heavy, and the bottom of this Augean stable thoroughly cleansed, no ill resulted, but if the monsoon failed, and the river remained uncleansed, when the hot weather returned, the water became low, and the filth at the bottom was exposed to the sun, the smell was most offensive, and *an attack of the cholera was the certain result*, the only victims being those residing within a short distance from its banks."

In the western part of Europe, influences connected with the living have long been noticed, in closely aggregated communities, to display a similar propagative power.

The facts which the elaborate statistics, researches and arguments of Dr. Baly's report to the Royal College of Physicians, (London, 1854,) have brought to bear upon the opinion that *human intercourse* is, at least, one of the principal modes of transmission and migration of the epidemic cause, have *this* extent precisely. The learned author is barely willing to admit contagion as a rare, contingent *possibility*. It is difficult to evade the admission of this possibility. Certain facts maintain a degree of stubbornness in regard to it, difficult to reason away. I allude to such facts as those quoted by Dr. Alison* as occurring in Edinburgh in 1832, in Toulon, in 1833, and in Arbroath, Scotland, in 1853; those given by Dr. Berg in his treatise on the Cholera in Sweden, in 1850; one instance by Dr. S. H. Dickson, in Charleston, 1832,† and those mentioned by Drs. Simpson and Craig‡ as occurring in Scotland during different years; all cases in which the evidence consisted not merely in a succession of persons having been attacked after contact with the sick, but in that *these persons only* were attacked, for a long time before

* British and Foreign Medico-Chirurg. Review, Jan. 1854.
† American Journal of Medical Science, vol. xiii. p. 309.
‡ Edinburgh Monthly Medical Journal, 1849.

and after, while those around differed in no circumstance, except in the absence of such exposure. Other cases have also been given by Littré, Velpeau, Gendron, &c.* But all considerations enforce the exceptional character of such facts; while examples of the contrary,—that is, of the manifest absence of contagion under the most favorable circumstances for it, are innumerable. As an illustration of these I may name only that of Annan, in Scotland; which is a town nearly equidistant from Carlisle and Dumfries, between which places a constant communication is always kept up via Annan, this being directly in the main line of traffic; and yet this town was entirely exempt from cholera, in 1832 and 1848, although the disease prevailed both in Dumfries and Carlisle.†

We come, then, to find, in the facts and inductions of Dr. Baly, evidence quite in apposition with the present enquiry, the alternative of contagion, as a rule, being withdrawn. It is proper, however, to guard our admission of the force of these inductions, by refusing to believe that human intercourse has been the *only* means by which the epidemic has migrated, even across the ocean. The instances of the Tonawanda and Tuscarora, upon which the cholera broke out after two weeks, more or less, at sea, and in one of which it was cut short by an iceberg, while neither brought any sick into port, are familiar. In these, and many other similar occurrences, the disease is to be accounted for by an atmospheric visitation alone. The efforts made by Dr. Baly to do away with this clear explanation in the case of the two ships New York and Swanton, (December, 1848), are among the least philosophical of his reasonings; importation by them being impossible, as there was no cholera at Havre when they left there, and the passengers, Germans, had been three months domiciliated in the place before they sailed.‡ Dr. Baly does not deny the atmospheric mode of extension as occurring sometimes; although he believes it to be much more often traceable to *infection by means of human intercourse.* As, then, his careful analysis of

* Vide Tardieu on Epidemic Cholera, p. 114.

† Account by Dr. Grieve, of Dumfries, in Edin. Monthly Journ. of Med. Sci., April, 1854.

‡ Report, by Dr. James Wynne, on Cholera in the United States, in 1849 and 1850.

the facts, as well as the aggregate testimony of other observers, proves that this mode of infection does not consist in the *reproduction of the poison in the bodies of the sick*, so as to emanate from them as a true contagion,* we must infer that it is only by affording the conditions for the multiplication of the cause without the bodies of both sick and well, that human intercourse usually has its effect.

The universal report of those who have contributed to the statistics of Dr. Baly, is to the effect that mortality from cholera is almost invariably commensurate with the filth and destitution of the inhabitants and their abodes. Abundance of testimony† is afforded to the same point by other writers, especially in regard to large, crowded, and dirty towns; as in Moscow, Paris, Marseilles, Liverpool, Manchester, Edinburgh, &c. In Moscow, in 1832–33, the deaths were as high as 1 in 32 of the whole population.

In Holland, Suermann found the mortality to be 1·54 in 1000 in rural districts; in the towns, 8·93 in 1000. This latter fact may suggest to our consideration the comparatively slight degree in which lowness and dampness alone affect the mortality from this disease. And the candid assertion of Dr. Baly himself, that some of the districts in which the rate of mortality was highest in Great Britain, in 1849 as well as in 1832, "have a high level, and lie in the central regions of country where the rivers take their rise," may more clearly shew that elevation does not afford immunity, and that lowness and dampness act so far only as they are promotive of the accumulation of animal filth and its products. "In the evidence received," says the same writer, "lowness of site is not very prominently set forth among the unfavorable sanitary conditions; being, in fact, specifically mentioned only *five* times." Yet out of 68 places where cholera raged, bad ventilation and over-crowding of houses are mentioned *fifty four times*, defective drainage twenty eight times, cess-pools, open sewers, &c., sixteen times, &c. Among the striking instances in which a very partial distribution of the epidemic occurred in almost contiguous localities, *pari passu* with variation in the

* Schmidt, Characteristik der Cholera, p. 81.

† E. g., Milroy, on Cholera and Quarantine; Reid, Letter to Lord Morpeth, 1848; Starr, Discourse on Asiatic Cholera, etc.

above respects, I may remind the reader of that of the three prisons at Wakefield,* on the same plot of ground, seventeen acres in extent.

We may recall here, also, the illustrative fact, that Orton, in his excellent treatise on the Cholera in India, while alluding to the effect of high and dry sites, observes, that "unhappily the immunity arising from situation was only temporary."† Again, Jameson, in a history of the Epidemic Cholera of Bengal,‡ mentions that it would "sometimes single out *elevated* and *airy* points, sparing those in the plain below." "It *always*, however," he adds, "affected a *crowded population*." In Russia, Dr. Frettenbacher, of Moscow, states, in a statistical report, that "it propagated itself *especially* in unhealthy and confined dwellings."§ S. Rogers, already, quoted, says, expressly, that it "has no (direct) reference to the geological structure of the country."

A valuable amount of testimony is afforded in regard to the influence of the *drinking water* of localities. The sweeping generalization of Dr. Snow, to the effect that this, namely, conveyance by the drink and food of the sick and others, was the principal or only mode‖ by which the disease was extended and transported, proves to be incorrect; witness the instances of attack at sea, of slow migration over sea, &c. But the effect of the water-supply is still of great importance, as showing the power of *animal contamination*. Bethlehem Hospital, supplied by an artesian well, had among 400 inmates, no case of cholera in 1849; it being the only large lunatic asylum in London which escaped, as it was the only one furnished with spring water. The facts with regard to the different districts supplied from the Thames, some from above and others from below the entrance of the sewers, are very remarkable; showing a difference, between the two extremes, of a mortality, in the one case, (of contaminated water) of from 28 to 205 in the 10,000 inhabitants, and in the other, (purer water) of only from 8 to 33 in the same number.¶

* Op. citat. p. 20.
† Op. citat. p. 404.
‡ Reviewed in Chapman's Journal, vol ii. p. 361.
§ Gazette Médicale, Jan. 13th, 1849.
‖ Oration on Continuous Molecular Changes, p. 18.
¶ Baly's Report, p. 205.

Let us refer, in this connection, to the conclusions reported by Dr. Pettenkoffer, of Munich, to the Bavarian Government.* The substance of them is essentially as follows:

"The products of decomposition of human and animal excrements contained in the soil, appear to be the elements that determine the soil's capability for absorbing the miasm, independently of the elevation above the level of the sea."

"The excrements of cholera patients, when in a state of decomposition, become fertile sources for the propagation of the disease in families."

It is, we need hardly repeat, justly observed by Dr. Baly, that the influence of the drinking or other water cannot be shewn to consist in its serving as a vehicle for a poison, a contagion, generated specially in the bodies of those who have suffered from the disease. We have seen that this cannot be, since there *is no such* contagion, generally speaking, if it even can ever exist. I refer once more, upon this point, to the inquiries and experiments of Schmidt, and of Meyer, Marshall, and others, mentioned by Dr. Gull,† as well as to the earlier ones of Lizars, Coste, &c.,‡ and those of the surgeons and medical students at Moscow and Dantzic, in 1832.‖

As illustrative of the same topic, the observations of Prof. Thiersch, of Munich, should be alluded to.§ He found that "the matters evacuated by vomiting and diarrhœa do not, when recent, propagate the disease; they are not contagious. If the matters evacuated by stool are left to themselves, at a temperature of from 41° to 50° Fahr., in from three to seven days a change takes place; they undergo a process of fermentation; they are then capable of exciting cholera in healthy individuals." This position is supported by an account of careful trials made upon animals. These experiments being, of course, performable only at the time and place of the prevalence of a cholera epidemic or endemic, there is nothing to oppose, but everything to favor the opinion, that matters of the kind mentioned serve only, like

* Med. Times and Gazette, Nov. 18th, 1854.
† Reports, &c., p. 122.
‡ On Cholera Asphyxia in 1832, p. 61, &c.
‖ Ibid, p. 62, note.
§ Med. Times and Gazette, Nov. 1854.

other decomposable animal materials, as a *pabulum* or *nidus* for the sustenance and development of the unknown *specific cause.*

We may remark, also, that the same explanation would appear to apply to the experiments narrated in the Edinburgh Medical and Surgical Journal (April and October, 1854) by Dr. Lauer Lindsay. These afford us no reason for their exemption from the category in which Dr. Lindsay places those of Mr. Marshall, published a year earlier,* namely, that "all the experiments hitherto made appear to be negative in their results, objectionable, or inconclusive." Referring to the observations of Dr. Thiersch, just given, we may note, upon this point, the fact that the time during which the animals (dogs) used by Dr. Lindsay were exposed to the combined effects of confinement, swallowing and breathing the matters of evacuation and perspiration of cholera patients, was in no case less than seven days (from the 19th to the 26th Nov.) before marked symptoms occurred; and that these symptoms ought hardly to be called *specific*, as the discharges were "decidedly biliary,—green—and greenish feculent matter," and "emitting an intolerable stench." Dog No. 1 is also stated to have become *somewhat lively and greatly better* after having eaten a quantity of the flesh, fat and blood of dog No. 2, which died on the previous day. The expression of Mr. Marshall is clearly correct, that this evidence is still "short of actual proof."

Leaving trans-atlantic authorities, we shall find in the new world a still increasing force in the testimony in regard to the subject of this discussion. On referring to the "Report by James Wynne, M.D., on Cholera in the United States in 1849 and 1850†," we may observe, upon almost *every page*, matter directly to our purpose.

A single quotation may therefore suffice as an example and illustration of this.

"As a *general fact*," says Dr. McPheeters, of St. Louis,‡ "the cholera prevailed most in those parts of the city in which there were the *largest number of persons herded together*, where the streets were unpaved, and where there was the greatest amount of *filth* and moisture." In Louisville, Buffalo, New York,

* Brit. and For. Medico-Chirurg. Rev., April, 1853.

† Presented to both Houses of Parliament, and published in 1852.

‡ Op. citat., p. 15.

Philadelphia, and Boston, essentially identical, and equally emphatic, statements are made by the correspondents and collaborators of Dr. Wynne. In Baltimore, some very striking facts occurred* in the history of the epidemic in the Almshouse, in July, 1849. No cases being in the city at the time, those which took place in that Institution were accounted for (by Dr. Buckler) by the presence of a very large and foul overfloiwng cesspool, whose contents mingled with the washings of the dead house, &c. &c., upon the north side of the building. Upon this side, where there was a door opening to the north, all of the lunatic inmates, seventeen in number, were attacked with cholera, and all died. *The remaining inmates of the same building entirely escaped.* Of the eight medical students attached to the Almshouse, the four whose rooms were not thus exposed, escaped. The manager, who slept in a room above that of the students, looking to the north, was likewise seized with the disease, but recovered. His family, whose rooms looked to the south, escaped. In the cases which occurred among the pauper inmates, those generally were attacked who slept in a position exposing them to the wind from the north.

The whole tenor of the reports, from which the above excerpts are derived, is decidedly adverse to the opinion of *contagion* being at all a frequent, if it be even an occasional mode of propagation of cholera.

In conclusion, I will add only a brief allusion to a few localities and occurrences not mentioned in the above documents.

The history of the fatal epidemic at Columbia, Pa., in September, 1854, is very well known. Cholera had never appeared in that town before. What was the reason of its heavy visitation then? Chiefly the facts, that an exceeding drought had reduced the channel of the river to an unusually low ebb, and that, in its bed, a short space above the town, a number of carcases of sheep and other animals, thrown from the railroad trains, &c., were putrefying rankly in the sun. A reservoir which supplied many of the people with drinking water was filled from the river not far from that spot, and the wind blew from it directly over the town. If we are correctly informed, the first subsidence of the disease attended a change of the wind.

At Pittsburgh, shortly after the above events, a similar epidemic

* Ibid, p. 72.

occurred. A gentleman on a visit to that locality not many days before the disease broke out, informed me that the same condition of the rivers existed there, with a similar abundance of *accumulated, putrefying, animal matter*, exposed to the sun.

In Rhode Island, in the autumn of the same year, the writer was told that the local existence of cholera in a few spots, otherwise very healthy, might be traced in coincidence, at least, with a practice not uncommon along the shore of the sea or bays, of dragging up fish in quantities by nets, and spreading them out to rot for manure.

And, lastly, in Barbadoes, where a considerable fatality from cholera has at different times occurred, Dr. W. H. Freeman, late U. S. Consul to that island, reports a very similar sanitary condition to those above related, even to some extent recalling the last item mentioned.

There may be, perhaps, no actual novelty in the views above expressed, more than in the well-known facts by which it has been endeavored to support them. My object has been, simply, to collate such data as would seem to show the paramount comparative importance of animal matter in a state of "post-organic" change, as the food or fuel of the cholera-cause. The difference between this disease and Typhus (in origin) would appear to be, that while the latter may almost *invariably* be produced by the persistence of certain unfavorable sanitary conditions, the former, Cholera, is generated *only in the presence of a certain unknown contingent*, whose capriciousness of migration, partial subjection to temperature, and other habitudes, suggest the probability of the animalcular hypothesis.

Whatever the theory, the lesson from all the facts is one (often told but not yet well learned) of hygiene and prevention. Cities should be built and regulated to prevent epidemics, as they should be to afford security from conflagrations. The laws of public benevolence, like those of private morality, are an essential part of the economy of the world. As personal vice brings misery, by the violation of physical laws, so the aggregate vice of communities, and the neglect of the higher classes to do their best for those around them, meet with retribution, in those scourges, which, under the forms of plague, cholera, typhus, and yellow fever, desolate populations almost in proportion to the errors of their local life.

Hooping Cough. By LAURENCE TURNBULL, M.D. of Philad'a.

This disease has been to me one of much thought and considerable personal interest, from having had four of my children attacked with it in its most aggravated form. My attention was also particularly called to it during the months of May and June 1854, when the malady prevailed to a considerable extent in our city; cases of it have also continued to occur up to the present month, July, 1855.

In referring to the works of Hippocrates, (Sydenham Society's Edit. in two vols. London, 1849,) I find no description of hooping cough, neither is there any account of it in the Seven Books of Paulus Ægineta,* so that I would infer that the Greeks, Romans and Arabians were not acquainted with it as a distinct disease.

Dr. Willis was the first medical writer who accurately described hooping or chin cough, his work being published in 1682, (in two vols.)† It was not until the present century, however, that this disease was fully investigated and made known to the medical public, which was chiefly done by the labors of Rosen, Cullen, Schæfer, Hufeland, Mathaï, John, Authenrieth, Watt of Glasgow and Albers of Bremen. It is stated by Rosen, that it passed from the East Indies and Africa into Europe.

First stage.—The first stage of hooping cough has no distinct and prominent symptoms by which it can be distinguished from ordinary catarrh, or bronchitis, except, perhaps, a slight difference in the voice and cough which sounds louder and shriller; the expectoration is usually limpid, but in some instances I have noticed it opaque, yellow, and even greenish.

This period may last from five days to as many weeks. Lombard states that in an epidemic which occurred at Geneva, it lasted from one month to six weeks; when the hoop is going to occur, it is usually noticed in the second or third week, but I have had several cases where the cough was present without the hoop.

* The Seven Books of Paulus Ægineta, translated from the Greek, by Francis Adams, L. L. D., in three vols. London, printed for the Sydenham Society, 1844.

†"Tussis puerorum convulsiva, sue suffocativa et nostro idiomate *chincough* vulgo dicta." (Opera Omnia, Amst. 1682, vol. ii. p. 169.)

This absence of the hoop is often very unfortunate, for children may in this way propagate the disease, and cause whole families and even schools to be attacked. This fact was proven in the case of my son, aged seven years; he sat in school by the side of a little boy who had a cough, which was very sonorous and painful to listen to, but the anxiety of the teacher was much relieved by being informed that his physician did not consider it hooping cough; subsequently the youngest child of this family was attacked by the disease and hooped, and the boy was then kept from school, but too late to save the other members of his class, ten of whom took the disease, so that the school was nearly broken up; my son communicated it to his three sisters, who all suffered more severely from it than he did.

I therefore think that children should not be allowed to mix with their companions when suffering from a cough of this character, if the disease prevail in the locality.

Second Stage.—The second or spasmodic state of this malady, is easily known, by the peculiar sound and suffocating character of the cough. In this stage almost every organ is irritated, and it even produces discharges of blood from the nose and mouth. The expression of the countenance is most distressing. When this stage is at its height, the child seems to know by some inward sensation that the attack is coming on, and it either cries or lays hold of some object by which it can support itself until the paroxysm is over. The face and neck become swollen, and in some instances remain so, and the child, at the termination of a fit of coughing, either discharges some thick tenacious ropy mucus, or evacuates the entire contents of the stomach.

The least mental excitement, either of joy or sorrow, will induce an attack, and the number varies with the severity of the disease. The paroxysms last from one fourth to three fourths of a minute.

The average duration of hooping cough is from six to eight weeks if not checked, but in many instances it lasts as many months; second attacks are rare and yet they do occur. Hooping cough prevailed in this city with measles, in May and June, 1854, followed in October and November by chicken pox, and in January, 1855, by scarlet fever, with sporadic cases of catarrh and croup, showing a connection or relation one with another, so

that the same causes may give rise during an epidemic to simple catarrh, croup, hooping cough, or even measles.

The complications of hooping cough I cannot enter into, but the chief of them are croup, bronchitis, pneumonia, pleurisy and diseases of the brain and cavity of the abdomen, which are to be recognized by their characteristic symptoms.

According to Billard, post-mortem examinations have not revealed anything uniform in this disease, except bronchial catarrh in its various stages.

Sydenham imputed the disease to a subtle and irritating vapor in the blood. Hufeland considers that the eighth pair of nerves is diseased, and is the cause of the double irritation of the bronchia and stomach. According to M. Guersent (Dict. de Méd.) hooping cough is a catarrhal affection, seated in the trachea and bronchi, consisting of a specific inflammation, accompanied with spasm of the trachea and glottis. Dr. Watt, of Glasgow, considers the disease to be inflammatory and seated in the bronchi. Albers, of Bremen, considers hooping cough to be an affection of the nerves of the thorax, with which bronchitis is frequently complicated. Lænnec regards it as a variety of pulmonary catarrh, and from the convulsive character of the cough he calls it convulsive catarrh.

Dr. Webster (Med. and Phys. Jour.) is of the opinion that the symptoms, when closely viewed, suggest the impression that hooping cough depends upon inflammatory irritation of the brain or its membranes. This is the opinion held by Dr. Copland, and very many distinguised men of the present day, but to my mind it is not satisfactory. The hooping cough, in its first stage, is certainly of an inflammatory character, chiefly affecting the lining membrane of the air passages, but this is of a specific nature. In the second stage there is no evidence of inflammation indicated either by the pulse, skin, or any other organ, but there is a powerful irritation of the laryngeal constrictor, and bronchial muscles and nerves, producing a cough which occurs rapidly many times so that a single inspiration is followed by five or six successive expirations constituting paroxysms of coughing (tussis accessus), accompanied with redness of the face, watery eyes, headache, tinnitus aurium, fulness of the cervical veins, retching and sometimes vomiting.

By some writers it has been considered that this disease was produced by a peculiar miasma, acting chiefly on the nerves, and is also ascribed to the presence of minute insects in the air (Boehme—Linnæus,) or, according to Prof. J. K. Mitchell, its epidemic origin may be a peculiar fungus; "the spores of these plants are not only numerous, minute, and indefinitely diffused, but, like the animal, all have the power of penetrating into and growing upon the most interior tissues of the human body," passing into the systems of those exposed to its influence by the respiratory organs or stomach, producing the irritation of the mucous membrane of the air passages. "Introduced into the body through the stomach, or by the skin or lungs, cryptogamous poisons are known to produce diseases of a febrile character, intermittent, remittent and continued—and even the disease of the mucous membrane termed aphthæ, arises from the presence of minute fungi."*

Dr. M. has not made this application of his doctrine to this particular disease, yet I do not see any good reason why it should not be so applied. According to Dr. Spengler, of Ellville, epidemic diseases depend on the presence or absence of ozone. He states that in the village of Roggendorf, in Mecklenburgh, towards the close of 1846, when slight catarrhal affections became prevalent, but slight traces of ozone were to be detected in the air. With the opening of the following year, however, these catarrhal affections assumed the severest forms of tracheal and bronchial disease, and hooping cough became common both among children and adults; then reagents detected a great increase of ozone in the atmosphere."†

Prognosis.

The prognosis in uncomplicated hooping cough is very favorable, and is unfavorable, only, in proportion to the dangerous nature of its complications and the age of the child; the best season for a favorable termination is spring or summer.

The modes of Propagation.—The disease may occur epidemically or sporadically, and it possesses infectious properties. It is propagated through a family from one to another; they are not all apt to be attacked at the same time, and by removal to a dis-

* On the Cryptogamous Origin of Malaria and Epidemic Fevers. J. K. Mitchell, M. D. Philada. 1849.

† Lond. Med. Gaz. Henlie's Zeitschrift, vol. vii. p. 1.

tance a child may escape. Dr. Cullen believed that it disappeared in from four to six weeks, but this has not been proved by subsequent observation. Children who have suffered from this disease, should not be sent to school or play with their companions for at least two months.

Treatment.—There are but two classes of symptoms to be combatted in this disease when no complication exists. The inflammation must be reduced by depletion, expectorants and refrigerants. In the second class of symptoms, the chief object is to diminish the abundant secretion and allay the great irritability of the laryngeal constrictor, and bronchial muscles and nerves.

The means to accomplish this, in my hands, has been the abstraction of blood; the application of a few cups or leeches to the nape of the neck or under the clavicle, with counter irritation, by means of sinapisms and blisters, which will soon allay the congestion of the brain or lungs. To diminish the febrile action small doses of tartar emetic, combined with Dover's powder or prepared chalk, with the free use of syrup of ipecacuanha as an emetic may be given; these will lessen the bronchial inflammation, and remedy the often disordered state of the stomach and bowels.

During the whole stage of the disease, demulcent drinks should be freely administered, such as flax seed tea, barley or rice water. When fully satisfied that the inflammation has been subdued, indicated by a slower pulse, less heat of skin and no active congestion of the brain or lungs, I have then followed the treatment with belladonna, and my success with this remedy has been most gratifying. Before administering it I tried, in vain, the free use of cochineal in combination with alkalies, assafœtida, opium, alum, hydrocyanic acid, &c. In every instance in which the system was fully brought under the influence of the belladonna, indicated by dilatation of the pupil with confused vision and reddened skin, I was enabled to check the annoying cough and hoop of thirteen children during the months of May and June, 1854, and seven cases since that time, making twenty cases in all, eight males and twenty females; the youngest was nine months and the eldest ten years.

The following was the method followed: The system being prepared by reducing the inflammation by the means before spoken of, obtain, if possible, English extract of belladonna, fresh and

good; let the extract be triturated with water or simple syrup; if it is to be kept for some time, add a small quantity of alcohol. The dose for a child three months old is the sixteenth of a grain every three hours, to a child one year one eighth of a grain, and so to other ages in proportion.

Inform the parent or nurse of the change it will produce upon the eye, also that it may redden the skin. When full dilatation of the pupil is brought about, the medicine is to be intermitted until it has gone off again; the belladonna is to be administered in slightly increasing doses, so as to keep the child under its influence for several days or until the paroxysms are checked, which will usually occur towards the sixth or eighth day of the second stage.

In the twenty cases cured by the use of the belladonna the cough and hoop returned in a few cases on exposure to cold, or in disagreeable, windy weather; but by combining the extract with syrup of ipecacuanha a few doses soon checked the cough and hoop; in only one case out of this number was it complicated with inflammation of the lungs, and this case recovered.

The average duration of my twenty cases was ten days, after the hoop had commenced when the case was free from complications, which shows the great advantage of this treatment. The ordinary duration of the disease, when treated in the usual manner, is from 1½ to 3½ months; even by prussic acid, or the application of nitrate of silver, the average given is from two to three weeks. It is stated by Dr. Gibb that, with the use of nitric acid, the average duration was only six or seven days. Several physicians who have used this remedy, however, do not find such favorable results from its use.

I have added to my communication some extracts from the experience of a few distinguished medical men on the use of this important agent, belladonna.

This remedy was used in hooping cough about the year 1783 by Dr. Buckhaave, of Copenhagen, who gave the powdered root in doses of two grains, morning and evening, to a child of five or six years of age. The cure, it is stated, was generally accomplished in from seven to fourteen days.*

*Dr. Duncan's Commentaries for 1793, and Dr. Gibb on Pertussis, p. 282, 1854.

Dr. Miquel, (of Neuerhaus,) says the belladonna is a remedy upon which he can always depend in this disease. In the course of many epidemics which he has observed during fifteen years, he has constantly cured the cough in eight days.*

Dr. Samuel Jackson, of this city, late of Northumberland, who although he was not the first to employ the belladonna, yet by his valuable publication in 1834 brought its virtues prominently before the medical public, has continued its use for twenty years, and his confidence in its powers to arrest the paroxysm and cure the second stage of hooping cough in the great majority of cases is undiminished.

Dr. Hiram Corson, formerly President of the Medical Society of the State of Pennsylvania, a distinguished practitioner of Montgomery county, Pa., in a paper on the efficacy of belladonna as a remedy in Pertussis, published in the Amer. Jour. of Med. Science, for Oct. 1852, makes the following observations: "My experience in pertussis had satisfied me that of all the remedies in common use, those recommended by writers upon diseases of children are almost useless. Children affected in the winter continued to cough and strangle and suffer for many weeks with scarcely a perceptible amendment. It was painful to visit and mortifying to prescribe for those afflicted with this malady."

He commenced the use of belladonna in four cases, and in one week they were all well. His method of using it was to begin with the sixteenth of a grain to children under one year every two hours, and increasing a little every day until full dilatation of the pupil occurred, the skin became flushed and vision confused; this he accomplished by dissolving eight grains of the extract in an ounce of water, nine drops of which contained the eighth of a grain.

In an epidemic in 1840, he used the belladonna in hundreds of cases with great relief in nearly all. By giving it in small doses at first, the fears of the patients were allayed. In 1847–8 he also prescribed it in numerous cases with much success. He concludes his paper in these words: "During the last seventeen years, I have given the extract of belladonna to hundreds of patients from two months to fifty years of age, and am firmly

*Vol. vii. Amer. Jour. Med. Sciences, p. 524, from Archives Generales, August, 1830.

convinced that it has a greater control over hooping cough than any other remedy in common use. That while, in a few cases, the system did not seem susceptible to its action in the doses I have prescribed, yet in nearly all the disease yielded quickly. It is a safe and efficient remedy for pertussis in children of any age.

Dr. Eberle, in his Treatise on the Diseases of Children, second edition, remarks "that the belladonna has been highly celebrated, and is without doubt, by far, the best article of the kind we possess. My own experience leads me to testify confidently on this point. I have prescribed it within the last six years, (1834,) in perhaps twenty cases, and in the majority of them with evident advantage." Professor Borda, he remarks, was the first he believed who used it as a remedy, and his belief in its efficacy is almost unlimited.

Hufeland and Alibert are almost equally decided in their praise of the virtues of this article.

The mortality from this disease in our city in 1850 was 114, 1852, 168; and for 1853, was 64. In 1853, in the district of Richmond it occurred as an epidemic. In severe cases, Dr. Janvier used the belladonna with the best results. "It mitigates the paroxysms better than any other sedative."*

Dr. Condie remarks in his work on diseases of children, that the narcotic from which the greatest amount of benefit is to be anticipated in this disease, is unquestionably the belladonna; it has been very extensively employed, and the evidence in its favor is strong and conclusive, (by Kahleiss, Janin, Hufeland, Widemann, Raisin, Guibert, Alibert, Shäfer, Laennec, Müller, Blache, Maunsell and Lombard.)

He further remarks that he had given the belladonna a very fair trial, and has, in many cases, been pleased with the prompt and decided relief produced by it, while in other instances it appeared to exert no influence whatever."

I think that this last remark may be often accounted for by the bad character of the belladonna, which is even found in some of the drug stores of this city, for it is an uncertain preparation unless when procured by evaporation in vacuo, for some samples from some of the Parisian shops were found by Orfila to be quite inert.

*Report Phila. County Med. Society, for 1853.

Dr. Williams, of London, has used belladonna with great advantage in his practice. He gives it in quarter-grain doses to a child of two years, increasing the dose to double that quantity or more, where it fails to relieve. He remarks that these doses, in general, cause some dilatation of the pupil, and conceives that the remedial agency of the drug depends on the same power to diminish irritability of the bronchial and laryngeal muscles which is here evinced with regard to the iris."*

Dr. G. A. Rees has found belladonna one of the most efficacious remedies in Pertussis.†

Dr. Waller cured two cases with the twelfth of a grain of extract, three times a day; prussic acid and conium had failed in affording any permanent relief.‡

Aberle assigns the highest place among narcotics to be belladonna in hooping cough.

Dr. Churchill says that this is perhaps the most influential narcotic and sedative we possess (in pertussis); it has been very extensively employed and the evidence in its favor is very strong.§

Belladonna has been eminently useful in the epidemics of hooping cough which M. Debreyne has observed, but recourse should not be had to it until the inflammatory element has been overcome by leeches, emetics, &c.

Dr. A. T. Thompson says, I have ordered the extract of belladonna in doses of one-eighth of a grain to a child of eight years, and gradually increased the dose to a quarter of a grain. Its power over the cough is extraordinary.‖

I might bring forward the testimony of many other writers, and a mass of evidence from medical practitioners, to establish still more firmly the fact of the efficacy of belladonna in this peculiar malady, but it will not, I trust, be necessary.

I will now endeavor to give an epitome of the experience of the best writers in the treatment of hooping cough by means of other agents.

The first of these which I will notice is *alum*, which has been

*Gibb on hooping cough, p. 284, from Medical Gazette, Feb. 1838.
†Diseases of Children, 2d edition, 1844.
‡Lancet, vol. 1, 1845, p. 137.
§Elements of Materia Medica.
‖London Jour. of Med., April, 1850.

very highly recommended by Dr. Golding Bird; it has been employed with success by Dr. John F. Meigs, of this city, who speaks of it as follows, in his useful work on the diseases of children: "From reading Dr. Bird's remarks on alum, and prompted by my knowledge of its admirable qualities in the treatment of croup, I was led to make trial of it in the disease under consideration, and I believe I may say that it has exerted a more decided influence in moderating the violence of the disorder than any that I have ever made use of. I have administered it in fifteen cases, beginning in the course of the second stage.

In all it was beneficial, and in some the effects were strikingly useful, the improvement being more rapid than I had ever seen to result from other remedies." Dr. Bird gives from two to six grains every four hours. His formula is as follows: ℞. Aluminis, gr. xxiv; Ext. Conii,* gr. xii; Syrup Rhœados, ʒii; Aquæ Aneth. f.ʒiij. ℿ. Give a medium-sized spoonful every six hours. Dr. Meigs gives it in smaller doses, and without the Ext. Conii. To children under one year, half a grain to a grain three or four times a day; and to those over that age, two grains every six hours.

Dr. Crossly Hall, an English physician, employs the *alum* in powder, prescribed in a little water eight times a day, and he considers it a very useful remedy.

Dr. Davis highly extols the efficacy of alum in pertussis. In the late edition of Underwood's Treatise, edited by him, he says, "After a long trial, I am disposed to attach more importance to *alum*, as a remedy in hooping cough, than to any other form of tonic or antispasmodic. I have often been surprised at the speed with which it arrests the severe spasmodic fits of coughing; it seems equally applicable to all ages, and almost to all conditions of the patient. The dose for an infant is two grains three times a day; and to older children four, five and up to ten grains may be given mixed with syrup and water."

I have employed *alum* both in the case of my patients and my own children, and gave it freely; it moderated the intensity of the disease, but it did not in my hands make a cure, so that,

*This is considered by Dr. Butter as *the* remedy, namely conium, for hooping cough, and he eulogizes its use.

after its use, for ten days, I had to resort to the belladonna, which in a week completely checked the hoop.

Another agent which has been very highly lauded is the hydrocyanic acid, which is considered by Dr. Thompson, of London, to possess a "specific power" over the disease.

Dr. West, of London, author of a valuable treatise on the diseases of childhood, says, "that the acid sometimes exerts an almost magical influence on the cough, diminishing the frequency and severity of its paroxysms almost immediately, while, in other cases, it seems perfectly inert; and again in others, without at all diminishing the severity of the cough, it exerts its peculiar poisonous action on the system so as to render its discontinuance advisable."

He recommends it to be given by itself, diffused in a little distilled water, sweetened with simple syrup, and the dose he begins with is half a minim every six hours for a child nine months old. He has never but once, however, seen really alarming symptoms follow its use, though he has employed it in many hundred cases; still he remarks that although the severity of the cough may be relieved by the acid, it does not enable the practitioner to dispense with other remedies.

Dr. Hamilton Roe, in his treatise on hooping cough, gives to an infant three quarters of a minim of hydrocyanic acid, Scheele's strength, gradually increasing it to a minim, which is administered every four hours; for a child of three years of age one minim, gradually increasing, if necessary, to a minim and a half every four hours. Dr. Roe says he is convinced, from the result of all the trials he has made, that this drug will cure almost any case of simple hooping cough in a short time. Dr. Edwin Atlee first used it in 1824, and from that year until March, 1832, he says he has treated more than two hundred patients, and never failed to cure in from four to ten days.*

This medicine is highly recommended by Muhrbeck, Kahleiss, Volk, Heller, Granville, Lombard, &c. I have tried this acid, but it did not at all please me in its effects.

Another remedy which demands our notice is the precipitated subcarbonate of iron, (ferri sesquioxidium.) The following

*Amer. Jour. Med. Sci. vol. vii. and vol. x.

observations on its use are by Dr. H. C. Lombard, of Geneva, who, after praising the virtues of assafœtida, flowers of zinc, opium, prussic acid and belladonna, says, "I come now to my specific, or rather to the remedy advised by Dr. Steyman, as the best antispasmodic in hooping cough. Dr. Steyman had advised to give from four to ten grains of subcarbonate of iron in the twenty four hours, he gave as a rule to increase one grain for each year, so that a child six years old was to take six grains in a day, but from the beginning I found the dose quite inadequate, and I increased it to twenty-four and thirty-six grains in young children. I have given it either with water and syrup or mixed with a cough mixture. It has never produced any inconvenience. On the contrary, I have found that all the children treated after this method were much less weakened, and recovered faster than with all other remedies. The proofs of the advantageous effects of it have been so numerous that I can scarcely enter into the detail; however, I may give a few facts to corroborate my assertion. In a child four years old I gave the subcarbonate of iron, and the fits, which in the preceding week, had been 101 in number, were reduced to 66 in the following week. In a weak and debilitated boy, aged seven years, the powder of belladonna had proved quite useless, when I tried the powder of iron, so prompt was the effect that in a few days the boy was quite cured; the sister of this boy was also cured with great rapidity. The last case of hooping cough which I have treated lately was of four months duration, and every thing had proved useless, when I gave the iron powder, which in the space of a few days succeeded in making the cough less and less.

In fact, I think I may assert with security, that the subcarbonate of iron enjoys a remarkable property to make the fits less violent, to diminish the number, and after a certain number of days to cure entirely the hooping cough.

It enjoys, besides, the advantage of strengthening the little patients, and gives them force to resist a complaint which sometimes lasts some weeks, and generally leaves the patients weak, low and exhausted. In some of those who have taken it, I have often seen, during the first days, a temporary increase of the cough, but it always subsided after two or three days, and did not prevent the good effects of the medicine. The good effects

obtained by the use of the iron powder are easily explained by its antiperiodic and antineuralgic properties, and it shows a posteriori how much the hooping cough resembles a true neuralgia, or, at all events, a true nervous disease."

I have not tried this remedy, and can, therefore, give no opinion of its efficacy; but should judge from its tonic and blood-restoring properties, that it would prove a useful agent in low anemic or debilitated cases.

Garlic is a remedy very highly recommended by Dr. Dewees; indeed, he states in his work on Diseases of Children, "that he has never employed any remedy of equal efficacy."

A child of six or seven years may begin by taking a third of a common sized clove, morning, noon and evening, in the absence of all febrile excitement, gradually increasing the dose.

Mr. Sutcliff combined the Peruvian bark with cantharides, and administered it with great success in hooping cough during twenty years.

The following is his formula:

℞. Tinct. Cort. Peruv. f. ℥vi.
Elix. Paregor. ℥ss.
Tinct. Canthar. ℥i. M.

Of this mixture, small doses were given three or four times a day, gradually increasing until a slight strangury was excited, then the dose was to be diminished.

When the active symptoms have subsided, Dr. Beatty, of Dublin, used the same remedy, and it is also recommended by Dr. Graves. The following is his formula:

℞. Tinct. Cinch. C. ℥v.
" Lytta,
" Camphora, *aa.* ℥ss.

M. S. A teaspoonful 3 times a day in flaxseed tea or barley water.

Professor Trousseau recommends the following solution of nitrate of silver in hooping cough: one-fifth of a grain in solution with simple syrup daily.

Cauterization by nitrate of silver has also been employed as a remedy in pertussis by Dr. Eben Watson, of Glasgow. The strength of the solution is gr. xv. to the ounce of water, applied every second day, by means of whalebone tipped with sponge, at

first to the pharynx, and then to the glottis and larynx. The whole number of cases treated by M. Joubert and Dr. Watson, in 1854, were 167.

Cured in two weeks,	96	cases, or	57.4	per cent.
" in three or four weeks,	61	"	36.5	"
Resisted the treatment,	9	"	5.3	"
Died,	1	" or nearly	0.6	"

To prevent the irritability of the stomach, he gives frequent small doses of heavy magnesia, combined with a few grains of the tris-nitrate of bismuth. He also employs the index finger or teaspoon to make the application to the throat of children.

Nitric Acid was first recommended by Dr. Arnoldi of Montreal as a remedy in pertussis with much success, and it has been adopted by Dr. Gibb, of London, late of Canada, who has published a work on hooping-cough in which he has given the opinion of ninety-three physicians in relation to its pathology, with its history, mortality, complications and causes. He has also entered into a consideration of forty-three remedies, viz., venesection, leeches, emetics, antimonials, external applications, change of air, warm bath, hydrocyanic acid, laurel water, belladonna, opium, hemlock, henbane, digitalis, tobacco, arsenic, silver, iron, zinc, lead, copper, cauterization by nitrate of silver, inhalations, coffee, Peruvian bark, quinine, hydrochloric acid, sulphuric acid, nitric acid, cochineal, alum, tannin, vegetable acids, alkalies, vaccination, cantharides, musk, assafœtida, meadow narcissus, cup moss, castor, nux vomica, and miscellaneous remedies. He remarks that the nitric acid has succeeded over and over again when other means have failed, and it is not such a hazardous remedy, when administered with ordinary precaution, as many described by him in his work. Dr. Arnoldi's method of prescribing the acid is as follows:

"To a tumbler full of very sweet water (almost syrup) add as much acid as will bring the water to the strength of pure lemon juice, when it is ready for use; an adult may consume this quantity in three or four hours, a child one year old may take a desert spoonful every hour."

"He has remarked that the efficacy depends on the amount taken, and that especially by the frequency of repetition, to save the teeth, he advises a solution of carbonate of soda, two

drachms to eight ounces of water to be used as a gargle immediately after taking the acid."

"The object entertained by Dr. Arnoldi, in using this acid as a remedy, was to introduce the elements of the atmosphere into the blood by the process of gastric digestion, so as to enable the lungs to outstand the stage of temporary asphyxia. Whether the theory be correct or not, the result, he says, of his practice has been almost universally successful." He then goes on to give the outlines of twelve cases which were treated by Dr. A. with success. The doctor met with a few cases where the disease seemed to resist the action of the acid, owing, he remarks, to "spinal torpor at the track of the eighth pair and phrenic. In these the application of an ointment of the biniodide of mercury, so as to produce the specific eruption, and this reproduced a second and a third time, completely restored the efficacy of the acid."

"Dr. Gibb's own cases were sixty-four in number, which are reported as cured; he combines the acid with honey or syrup and compound tincture of cardamom, &c."

Chloroform has been employed by Dr. Fleetwood Churchill, as a specific remedy in hooping cough in four cases which he reports; in two of these the hoop ceased in two days; in the third case it required its use for three weeks; in his fourth case the patient had to resort to the use of Prussic acid to complete the cure.

"In the case of young children he drops thirty drops on the palm of the hand, the mother to hold this before the mouth and nose of the child sufficiently near to inhale it fully, but not so close as to exclude a portion of atmospheric air. The best time to begin is just as the patient feels the irritation in the chest increased to a cough.

Still he considers it more suitable for young persons of twelve or fourteen years old and upward. Two successful cases have come under my notice; the method was by placing a small portion of chloroform in a vial, and when feeling the inclination to cough, to inhale by removing the cork, the small bottle being carried in the pocket."

Before concluding my remarks upon the treatment of this disease, I must not neglect to state the great importance attached by some authorities to a change of air in the last stage,

or the debility which results from it. Dr. Lombard remarks, that "in many cases which had baffled all attempts to stop the cough, a change of air has accomplished the cure. I have found it equally indifferent to go out of town or to come into town, provided there be a change; and even in the short distance of half a mile, I have seen the good effects of this plan of treatment." Dr. West, of London, says, that change of air with the use of alum during the last stage, generally expedites the cure." According to Dr. Gregory, change of air after severe and protracted cases is the only thing that will give the patient a chance of recovery.

Billard states "that goat's milk, pure or diluted, a good nurse, a residence in the country, particularly in the spring and summer, will materially conduce to the recovery of infants at the breast."

But nothing can be more pernicious than the exposure of children suffering from hooping cough, to cold or inclement weather, for it will bring back the cough and cause inflammation of the lungs.

Case of Wound of the Throat, in a Maniac, in which the Epiglottis was nearly severed. Recovery. By GEORGE DOCK, M. D., Harrisburg, Pa.

On the morning of the 30th of Nov. 1853, I was summoned to the Pennsylvania State Lunatic Hospital in great haste, one of the inmates, Mr. S——, having cut his throat whilst alone in the water-closet adjoining his room. Upon entering his room I found a man, about sixty years of age, lying upon the floor, in a pool of blood, with his throat cut literally from ear to ear. Life was apparently extinct; no pulse at the wrist, skin cold and bedewed with a death-like moisture; eyes set and filmy; teeth clenched and no respiratory movement of the chest. For a moment I supposed him dead. Placing my ear upon his naked chest, I however detected a faint pulsation of the heart and a feeble, smothered, respiratory whisper. I immediately had several of the attendants to apply vigorous friction to his extremities; sinapisms were laid to the calves of his legs and to his arms, whilst I proceeded to ligate the—yet oozing—superior thyroidal and lingual arteries, from which, with the external jugulars, he

had lost his blood, until from prostration he could bleed but little more.

Taking the opportunity of examining his wound more deliberately, I found he had cut between the thyroid cartilage and hyoid bone, severing the latter, with the tongue, from their attachments, the wound making a clean gap into the pharynx, about two inches wide: (the larynx being drawn down by the sterno-thyroid muscles that distance from the retracted hyoid bone.) I also discovered, after sponging out the clotted blood, that the epiglottis was cut, at its base, almost completely off; hanging but by a little cord on each side. To have thus left it would have been fatal. Of the expediency of putting a ligature into it, I, on the other hand, was somewhat in doubt. Concluding it to be the least of two evils, I armed a delicate, very sharp, curved needle with a fine silk thread, and proceeded in the following manner: I entered the needle at the centre of the base of the stump, only penetrating it about two-thirds of its thickness, then brought out the point of my needle on the top face of the wound, entered it on the corresponding face of the loose piece of the epiglottis, bringing the point of the needle out on its anterior face, about a line from the cut end, and drew the parts into neat and perfect apposition by tying the ligature, the ends of which I clipped close, trusting to the removal of them during the suppurative stage of the whole wound. Then came the larynx to be drawn up to its place and there retained. To accomplish this, I armed another needle with saddler's silk, pierced a fold of the cellular tissue and muscle on its sides—first one, then the other side; then carried the needle over a corresponding point of the hyoid bone, making it the tackle of my pulley, and with this loop I drew the root of the tongue, &c., and the larynx close together, tied my knot and cut off one end of each of these ligatures, bringing the other ends out with those from the arteries. Four interrupted sutures were then put into the integuments, and the wound was dressed in the ordinary manner. During all this time, my labors appeared to be spent upon a man in articulo mortis, yet still I determined to persevere.

I ordered a stiff, hot brandy toddy to be prepared and a stomach tube brought to me. But his jaws were so firmly set as to render it impossible to separate them by manual force; so I

took a large gum catheter and introduced it through his nose, as far down the œsophagus as it would reach, then took a small syringe, adjusted it to the catheter, and injected the toddy into him. This, in a short time, with warm, stimulating applications to his limbs, brought on reaction, which I *coaxed* on gently, feeling my way so as not to overdo the thing. I had the pleasure, before leaving him, to see him breathing nicely through the natural apertures, the pulse becoming quite perceptible at the wrists, and his surface restored to a moderate degree of warmth.

He gradually recovered, being fed on nutritious liquids by the tube; the wound granulated well, and in a couple of months he was sent home perfectly sound; his voice natural and strong, and his mind restored to a state of sanity.

Remarks.—The above case I think is one possessing several points of interest to the profession. The wound was an unusually extensive one; the hæmorrhage profuse, and his condition altogether unpromising. A wound of the epiglottis to such an extent is rare to recover from; and here let me call your attention to the fact, that, from the day of the injury until he recovered he had no spasmodic cough, and there took place perfect union in the epiglottis. You will also observe that in passing my ligature I did not penetrate the entire thickness of the epiglottis, so that the mucous membrane on the glottal face was left intact, to which circumstance, I think, was due, in a great degree, the absence of all irritation and cough. This was my object and idea at the time I did it, and if an erroneous one, I fortunately erred on the safe side.

To Dr. Curwen, the superintendent of the Hospital, and Dr. Dewitt, his assistant, much credit is due for their unceasing attention and kindly care to the patient during the progress of his convalescence.

Mortality of Philadelphia for April, May and June, 1855; *collated from the Health Office Record*. By WILSON JEWELL, M. D.

Within the quarter of the year ending June 30th, including a period of ninety days, there were 2374 deaths returned to the Health Office, averaging 26 per day. This number is less by ninety-five than was returned for the same period in 1854. Thus far, according to the tabular statement of deaths for the first six months, the city has enjoyed a greater degree of health than during the first half of last year; the mortality constituting the evidence.

The deaths from recorded diseases alone, have amounted to 1922. The remaining deaths, in all 452, are charged to external causes, old age, still-born, debility and unknown.

The excess of deaths in the male sex, amounts to 6.68 per cent. The males number 1268; the females 1106.

The deaths within the first year of life, not including the still-born, amounted to 512. Within the fifth year 920. Within the tenth year 1031, and within the twentieth 1129. According to these statistics, it appears that 32.62 per cent. of the mortality of our population, took place within the first decade of life, and 33.58 per cent. within the second. These calculations exclude still-born children, which amounted to one hundred and fifty.

The greatest mortality during the quarter, has been from those diseases of an inflammatory type, arranged under the head of Organs of Respiration, amounting to 624; five sevenths of which, or 543 are charged to Consumption of the Lungs, Inflammation of the Lungs and Inflammation of the Bronchia.

The deaths from Consumption of the Lungs, Still born, and Inflammation of the Lungs, each of which exceed one hundred, together with Debility which wants one of making one hundred, in the aggregate 868, constitute more than one third, or 43.36 per cent. of all the deaths for the quarter.

The decrease in the deaths from bowel complaints, at this season of the year, when compared with those in the second or like quarter of last year, presents a sensible difference. Last year in the second quarter the deaths from Cholera, Cholera Morbus, Cholera Infantum, Diarrhœa and Dysentery, amounted

to 173; whereas, the second quarter of the present year furnishes only 78—less 38.33 per cent.

The deaths from Small Pox, show a large increase over those for the same quarter of 1854; equal to 52.94 per cent. For the first half of the present year they have amounted to 93; more than double the number recorded for the whole of 1854.

Hooping Cough presents a considerable falling off. Last year the second quarter gave 45; this year 10; a diminution of three fourths.

The deaths from Measles likewise have declined 55 per cent. when compared with those for the same quarter of last year.

The deaths from Epidemic diseases exhibit a falling off of 15.80 per cent. contrasted with those of similar months in 1854.

The deaths from Still Born have increased 8.30 per cent. over those for the same months in last year.

Three of the deaths during the quarter were Centennarians, one of whom had reached her 115th year.

The Alms-house and the colored population yielded each about 8 per cent. of the deaths for the quarter.

On the whole, therefore, it may be safely inferred that the past six months have been more than usually healthy.

TABLE NO. 1.

Deaths for the second quarter of 1855 *classified.*

				Male.			Female.			
	Ap.	May	June	A.	M.	J.	A.	M.	J.	Total.
1 *Endemic & Contagious diseases* Zymotic or Epidemic	113	130	124	50	69	69	63	61	55	367
2 *Uncertain or general seat,* Sporadic diseases	102	120	89	51	69	50	51	51	39	311
3 Nervous system	149	167	146	82	90	77	67	77	69	462
4 Organs of Respiration	222	271	131	111	143	73	111	128	58	624
5 " Circulation	16	32	30	9	22	13	7	10	17	78
6 Digestive organs	41	53	43	20	27	19	21	26	24	137
7 Urinary "	6	2	6	3	1	5	3	1	1	14
8 Organs of Generation	4	7	4		1		4	6	4	15
9 " Locomotion		3	2		1	1		2	1	5
10 Integumentary system	3	1	4	1	1	2	2		2	8
11 Old age	17	20	10	7	9	3	10	11	7	47
12 External causes	37	33	28	26	25	27	11	8	1	98
Still Born	42	48	60	27	24	33	15	24	27	150
Unknown	18	22	18	11	9	7	7	13	11	58
	770	909	695	398	491	379	372	418	316	2374

TABLE NO. 2.

1. *Endemic and Contagious Diseases—Zymotic or Epidemic.*

	Male.	Female.	Under 1 yr.	1 to 2.	2 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	90 to 100.	100 to 110.	Total.
Cholera infantum	13	6	14	3	2													19
" morbus	4	3	1						1	1	1	1	1	1				7
Croup	30	21	5	16	28	2												51
Diarrhœa	13	12	6	4					2		2	4	2	3		2		25
Dysentery	13	14	4	4	2				3	7	3	1	2	1				27
Erysipelas	14	15	13	2	1				2		4	2	1	2	2			29
Fever,	1	1		2														2
" Bilious	6	6		1	1				2	1		3		4				12
" Congestive		1										1						1
" Intermittent		1		1														1
" Puerperal		20						1	16	2	1							20
" Remittent	2	3	1	1	1				1	1								5
" Scarlet	18	17	4	8	16	6	1											35
" Typhoid	21	18			3	4	2	5	6	5	7	3	3	1				39
" Typhus	8	5						1	6	1	3	2						13
Hooping Cough	8	2	8	2														10
Influenza	1	2									1		1	1				3
Measles	4	5	4		5													9
Small Pox	30	22	10	10	16	6	2	1	5	2								52
Syphilis		1		1														1
" secondary		1							1									1
Varioloid	2	3	1		3	1												5
	188	179	71	55	8	19	5	18	45	20	22	17	10	13	2	2		367

2. *Uncertain or General Seat—Sporadic Diseases.*

	Male.	Female.	Under 1 yr.	1 to 2.	2 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	90 to 100.	100 to 110.	Total.
Abscess	2	1	1		1			1										3
" Breast		1								1								1
" Lumbar		1				1												1
" Psoas		1											1					1
" Thigh	1										1							1
Atrophy	1	3	3		1													4
Cachexia	1		1															1
Cancer	4	1								1		2	1	1				5
" Breast		3								2				1				3
" Face	1													1				1
Cyanosis	6	4	9	1														10
Debility	53	46	38		1	1		1	2	9	7	11	11	10	6	2		99
Dropsy	15	14			1	1			4	2	2	6	7	3	2	1		29
Gangrene	1	1			1						1							2
Hemorrhage	4		1						1	1						1		4
Inflammation	1	1			1	1												2
Inanition	13	10	17	2						1	1	2						23
Inflammation of Throat	1	3	2							1				1				4
Malformation	7	3	10															10
Marasmus	40	32	46	8	10	1			1	3				1	2			72
Mortification	2	2									1	1	1	1				4
Scrofula	8	6	3	1	1	4	1	2	1	1								14
Schirrhus		1										1						1
Tumour of Abdomen		2								1		1						2
Tabes Mesenterica	5	3	2	2	1	1				1	1							8
Ulcer	1											1						1
Ulcer of Throat	3	2	1		1	3												5
	170	141	134	14	19	13	1	4	9	24	14	25	21	19	10	4		311

3. *Nervous Diseases.*

	Male.	Female.	Under 1 yr.	1 to 2.	2 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	90 to 100.	100 to 110.	Total.
Apoplexy	17	18							2	9	4	2	9	6	3			35
Concussion of Brain	1										1							1
Congestion "	24	10	9	6	3	6	1		2		4	2		1				34
Compression "	2								1			1						2
Convulsions	81	70	99	20	20	6	1	1	1	1	2							151
Disease of Brain	16	9	11	3	1	1	2		2	3	1	1						25
Dropsy "	28	27	20	16	10	5	1			1			1	1				55
Effusion "	5	9	1	1	6	3	1		1		1							14
Epilepsy	3	4	1	1						1	1	2	1					7
Inflammation of Brain	38	40	21	15	18	13	1	2		5	1	1		1				78
Insanity		1										1						1
Mania	5	3							1	3	1	3						8
" a Potu	4	1							1		4							5
Palsy	17	16		1			3		2	3	2	3	6	7	6			33
Softening of Brain	3	3			1	1						1	2	1				6
Tetanus	2	3			1			3	12									5
Trismus	2		2															2
	248	214	164	63	60	35	10	6	14	26	22	17	19	17	9			462

4. *Organs of Respiration.*

	Male.	Female.	Under 1 yr.	1 to 2.	2 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	90 to 100.	100 to 110.	Total.
Abscess of Lungs	2	3	1			1			1	1	1							5
Asthma	1	4	2	1							1	1						5
Congestion of Lungs	12	7	4	2					2	1	2	2	2	4				19
Consumption "	167	164	13	3	8	6	6	25	102	62	50	25	20	7	4			331
Disease of "		10	2	2	2					2	1		1					10
Dropsy of Chest	9	6		3	2	1					3	1	1	3	1			15
Effusion of Lungs	2	3							1	1		1	1	1				5
Gangrene "		1								1								1
Hemorrhage of Lungs	5								2	1	1	1						5
Inflamm'n of Bronchiæ	46	29	35	14	6	7		1	2	2	1	2	1	3	1			75
" Lungs	75	62	29	19	11	6	2	3	14	17	10	12	8	3	3			137
" Larynx	3	3	1	2	2				1									6
" Pleura	5	3		1	1			1	1		1	1	2					8
" Trachea		1			1													1
" Tonsils		1		1														1
	327	297	87	48	33	21	8	30	126	88	71	46	36	21	9			624

5. *Organs of Circulation.*

	Male.	Female.	Under 1 yr.	1 to 2.	2 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	90 to 100.	100 to 110.	Total.
Anæmia	3	2	2			2						1						5
Aneurism	1										1							1
Angina Pectoris		1									1							1
Disease of Heart	24	26	2		1	4	3	6	8	3	4	10	4	4	1			50
Dropsy "	5				1	1				1		1		1				5
Effusion "		1												1				1
Enlargem't "	6	3					1		4	3		1						9
Inflammat'n "	4							1	2		1							4
Rupture of Aorta		1										1						1
" Heart	1									1								1
	44	34	4		2	7	4	7	14	8	7	14	4	6	1			78

6. *Digestive Organs.*

	Male.	Female.	Under 1 yr.	1 to 2.	2 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	90 to 100.	100 to 110.	Total.
Abscess of Liver	1										1							1
Apthæ	1		1															1
Cancer of Bowels		1										1						1
" Liver		1									1							1
" Stomach	1	2											2	1				3
" Rectum		1									1							1
Cancrum Oris	2			1	1													2
Cirrhosis of Liver	3								1		1	1						3
Congestion of "	2								1				1					2
Consumption of Bowels		2				1							1					2
Colic	1	1							1			1						2
Disease of Bowels	2	4	1		1				1	2				1				6
" Liver	5	3	1							2	3	1	1					8
" Stomach		1									1							1
Dyspepsia	1											1						1
Dropsy of Abdomen	3	4					1		1	1	1	3						7
Hemorrhage Umbilicus	1	1	2															2
Hernia Strangulated	1	1								1				1				2
Inflammation of Bowels	15	10	7	3	2	1		1	4	1	4	1		1				25
" Colon		1		1														1
" Liver	4	5	1							2		1	3		2			9
" Peritoneum	5	12	1		1	1	1	1	3	1	2	4	1		1			17
" Stomach	1	5	1							1	1		2	1				6
" Stom. & Bowels	9	2	4	1		1			1		2		1	1				11
" Spleen	1					1												1
Intussusception	1	2	1						1					1				3
Jaundice		2											1	1				2
Mortification of Bowels	1		1															1
Obstruction "	1	2							1	1	1							3
Stricture of Rectum	1							1										1
Teething		3	1	1	1													3
Ulceration of Bowels		2							1					1				2
" Stomach	2				1					1								2
Worms	1	3	1	1	2													4
	66	71	23	8	9	5	2	3	16	13	19	14	13	9	3			137

7. *Urinary Organs.*

	Male.	Female.	Under 1 yr.	1 to 2.	2 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	90 to 100.	100 to 110.	Total.
Albuminuria	3								1		2							3
Cancer of Bladder		1										1						1
" Kidneys		1													1			1
Diabetes	1									1								1
Disease of Kidneys	1	1							2									2
Inflamed Bladder	1	1							1	1								2
" Kidneys		1									1							1
Rupture of Bladder	1											1						1
Stone in "	1												1					1
Uræmia	1													1				1
	9	5							4	2	3	2	1	1	1			14

8. *Organs of Generation.*

	Male.	Female.	Under 1 yr.	1 to 2.	2 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	90 to 100.	100 to 110.	Total.
Cancer of Uterus		5								1	1	2		1				5
Disease of Prostate Gland	1													1				1
" Uterus		1											1					1
Dropsy of Ovaries		1											1					1
Hemorrhage of Uterus		3							1	1	1							3
Inflammation "		2						1	1									2
Phlegmasia Dolens		1							1									1
Puerperal Convulsions		1							1									1
	1	14		1				1	4	2	2	2	2	2				15

9. *Organs of Locomotion.*

	Male.	Female.	Under 1 yr.	1 to 2.	2 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	90 to 100.	100 to 110.	Total.
Inflammation of Spine	1				1													1
Rheumatism	1	2							1		1	1						3
Spina Bifida		1	1															1
	2	3	1		1				1		1	1						5

10. *Integumentary System.*

	Male.	Female.	Under 1 yr.	1 to 2.	2 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	90 to 100.	100 to 110.	110 to 120.	Total.
Disease of Skin		1		1															1
Purpura Hemorrhagica	3	2	3		1				1										5
Rupia	1				1														1
Scurvy	1									1									1
	5	3	3	1	2				1	1									8

11. *Old Age.*

Old Age	19	28											6	16	21	1	2	1	47

12. *External Causes.*

	Male.	Female.	Under 1 yr.	1 to 2.	2 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	90 to 100.	100 to 110.	Total.
Asphyxia	3	3	4							1	1							6
Burns	4	5		3	3	1	1		1									9
Casualties	19	3		2		2	2	2	4	5	1	2	1	1				22
Drowned	33	1			1	7	2	2	2	7	9	3	1					34
Excessive Heat	1										1							1
Fracture	1								1									1
Exhaustion		1												1				1
Intemperance	9	4							3	5	2	1	1	1				13
Strangulation		1										1						1
Suffocation	3	1	1		1	1			1									4
Suicide	5								1			3		1				5
Violence		1							1									1
	78	20	5	5	5	11	5	4	14	18	14	10	3	4				98
Still Born	84	66																150
Unknown	27	31	20	2	3				6	8	7	3	3	6				58

TABLE NO. 3.

Deaths for the Second Quarter of 1855, *at sixteen distinct periods of life.*

Under 1 year,	512
1 to 2	196
2 to 5	212
5 to 10	111
10 to 15	35
15 to 20	63
20 to 30	254
30 to 40	210
40 to 50	182
50 to 60	151
60 to 70	118
70 to 80	114
80 to 90	56
90 to 100	7
100 to 110	2
110 to 120	1
	2224
Still Born	150
Total,	2374

Embraced within the above table were 190 from the Blockley Alms House; 172 Blacks, and 24 from the country, as follows:

	April,	May.	June.	Total.
Almshouse,	65	73	52	190
Blacks,	70	61	41	172
Country,	5	8	11	24
Total,				386

BIBLIOGRAPHICAL NOTICES.

A Monograph on Mental Unsoundness. By FRANCIS WHARTON. Philadelphia: Kay and Brother. 1855.

The analytical table which Mr. Wharton has prefixed to this work is admirably arranged. It shows the reader, at a glance, the manner in which this difficult subject is to be discussed, the relation of each part to the other, of each part to the whole, and greatly enhances the value of the work to the student, and as a book of reference.

The work is divided into two chapters; the first treats of "Mental Unsoundness in its legal relations," in which the law as it now exists in this country is fully laid down under four heads, viz:

I. What degree of unsoundness invalidates a contract or will.

II. What is necessary to be proved in order to deprive a party of the management of his estate.

III. What degree of unsoundness avoids responsibility for crime.

IV. How far intoxication affects responsibility for crime.

When our statutes, or the decisions of our courts, are at variance with the English law, the fact is noticed, and great labor has been given by Mr. Wharton to prove by citation of authorities that his view of the common law is correct.

We fully agree with him as to the great care and delicacy, with which the question of setting aside the will of the aged or partially deranged should be approached. After quoting from De Boismont to the effect that a person should not be deprived of liberty and the right to make a will on account of whimsical actions or words, the result of an erroneous belief, he says:

"Nor should it be forgotten that the effects of such incapacitation would be most cruel to the sufferer himself. Society is prone enough to make eccentricities and weaknesses the subject of contempt, ridicule or insult. The courts should be cautious how, by taking away the power to ensure respect, they thus increase the misfortune of a class into which no man can assure himself he may not fall—which includes almost the whole of those whose lot it is to reach extreme old age—and which already carries a burden sufficiently heavy. If such persons cannot reward by their bounty those by whom they are treated with tenderness, and by whose means their comfort is guarded, they will lose, in most instances, the only means remaining to them of self preservation. The law which thus deprives them of their own means of self support, should

tender them in return a refuge by which, by public sanction, they could exact that attention which their own influence no longer enables them to secure. This, however, is certainly not done now, nor could it be done on any intelligible basis, without consigning a large proportion of the most efficient members of society to an asylum. As society at present stands, the only remedy seems to be to throw the same tender guardianship around the feeble minded and the eccentric, as in a passage already cited has been so touchingly invoked by Chancellor Kent for the old."

The question of how Intoxication affects responsibility for crime is one of great importance. Mr. Wharton has handled it very ably. The law, he says, may be summed up as follows:

"1st. Insanity, produced by *delirium tremens*, affects responsibility in the same way, as insanity produced by any other cause.

2d. Insanity, immediately produced by intoxication, does not destroy responsibility, if the patient, when sane and responsible, makes himself intoxicated.

3d. While drunkenness *per se* is no defence to the *fact* of guilt, yet when the question of *intent* or *premeditation* is concerned, it becomes a material item of consideration."

In the second chapter, under the head of "Mental Unsoundness considered psychologically," he treats of the points in which psychology comes in contact with the law of the land. Our limits forbid our discussing as fully as we wish Mr. Wharton's view of this interesting subject.

He states that the experience of medical experts, like that of experts in all other branches of science, is part of the law of the land; it becomes, therefore, of the greatest importance that there should be a full understanding between the legal and medical professions in any case that comes before them, and that they also should act in common.

The following reasons for the consideration and respect which should be paid to the evidence of such experts in questionable cases will be read with interest. Mr. Wharton says:

"It is not to be denied that a lay observer, or an unassisted judge or jury, may be able to distinguish a case of fully developed and clearly manifested insanity; but, aside from the necessity of a knowledge of all the particular relations existing between a given state of disease and a given act, there can be no proper foundation for the infliction of punishment in any case, where the judgment of which it is the execution is not based on the greatest attainable amount of certainty. But this certainty can be no other than that which bears the seal of technical

science. Nor will a juryman, if properly tender of his conscience and of public opinion, base his verdict upon other evidence than that of those best able, from long training and close attention, to understand the features of the case. In some cases the difference between a scientific, or technical, opinion, and that of a layman, is not so much in the results attained, as in the guarantee afforded by the superior attainments and more minute expertness of the man of science. The declaration of such a man is insured against the possibility of error to the full extent of the protection of science in its present stage of development. *Pro foro* this degree of certainty is sufficient, because it is the highest attainable; but the same cannot be said of any other."

Monomania is considered under nine heads; we think another should have been added, viz: oinomania, or a morbid taste for liquor, which is sometimes produced by abuse of alchoholic and vinous drinks, and sometimes appears to be congenital, in either case overcoming the will and reason of the person affected, who often deplores his depraved taste, tries to resist, and for a time may, but any unusual excitement, accidentally tasting, or sometimes even the sight or smell of liquor, brings on a desire for alcoholic drinks, against which the will is powerless. Where this constitutional or acquired tendency is known to exist, it appears to us the law should make the same allowance for crime committed in a drunken fit that it now does when crime is committed by a person suffering from an attack of delirium tremens.

The 12th and last section of the 2d chapter is on the treatment of insane criminals. We entirely agree with the author as to the necessity of amending the law as proposed in the following extract, in which also are shown the evils of the present system.

"If the views taken in the preceding sections be sound,—if, in the first place, there are inherent difficulties in the way of making insanity a ground of defence on the trial of a man, who, on this hypothesis is psychologically incapable of either tendering or preparing any such issue; if, in the second place, the doctrine of instinctive or moral mania be allowed in legal theory the sweep which is asserted for it by medical experts, and which in this country at least is conceded to it by the Courts; if, in the third place, it be right that the present system of confinement of insane criminals be remodelled,—then it will become necessary for those to whom the work of legislation is committed to amend the law so as to reserve the question of insanity to be determined by a competent tribunal *after* a conviction of the fact of guilt. For the following undeniable evils result from the present system:

(a.) A tribunal of, at least, but secondary competency is charged with

the determination of the most difficult and yet most momentous question to which human observation can be applied.*

(b.) A subject is introduced into the question of guilt or innocence, as to which no fixed judicial rules can be laid down, and which really concerns only the character and the extent of punishment.

(c.) A fearful confusion takes place between the *sane* convict; the *insane* malignant convict, who requires discipline and is, in some degree, morally responsible; the *innocent* insane convict;† and the lunatic, who is in confinement, but is not charged with crime: for all of whom there is in some jurisdictions but *one* common method of discipline provided, viz: that of the penitentiary; in others, but *two*, that of the penitentiary and of the ordinary lunatic asylum. The result of this is acquittals in some cases, when there should be convictions; convictions in other cases when there should be acquittals, and in almost all cases an erroneous system of punishment.

The remedy for these difficulties is one to which we must come sooner or later, and for which the common law has been from the beginning always striving, and yet always losing from almost its very grasp. It is to confine the inquiry before the court and jury to the mere *factum* of the commission of the offence; reserving the question of treatment to be determined by a special commission of experts, to be appointed for the purpose of examining convicts alleged to be insane. The proposition to be put by the court to the jury, under such circumstances, is not, "Was the defendant capable of judging between right and wrong," a proposition which no jury can determine, but, "Did he," as a matter of fact, "commit the specific act charged." For whether he committed it as sane or insane, the result is, if the offence in point of law be indictable, that the safety of society requires that he should be placed in

* Dr. Hood very justly remarks, "All human tribunals are fallible, and how when this plea of insanity is raised, can we unveil the mind of the accused, and determine where responsibility ends and irresponsibility begins? We may appreciate outward and visible signs, but we have no *mentometer*, (if I may be allowed to coin a word) which will indicate the thoughts that may be passing through the mind. In medical jurisprudence the diagnosis between sanity and insanity is, in many cases, infinitely difficult; and it is upon this account that specialists in this branch of our profession so often come into collision with members of the bar, and draw down upon themselves occasionally animadversions from the judges on the bench. There would be no difference of opinion between the two learned professions if we could arrive at any fixed principles by which we could explain the silent operations of the mind; but this, so far as insanity is concerned, is as impossible in law as it is in medicine. We may adjudicate upon the overt act, but the motive which dictated it will very often elude the most searching examination. But this happens continually in sane as well insane life." Suggestions for the future Provision of Criminal Lunatics, by W. C. Hood, M. D. London, 1854.

And we may add to this the testimony of a great poet on a kindred point:

> "May it please your Excellency, your thief looks
> Exactly like the rest, or rather better;
> 'Tis only at the bar *or in the dungeon*
> That wise men know your felon by his features."

† See as to distinction between these, *ante*, § 232–251.

seclusion for such a period as will promote the joint ends of personal reformation and the preservation of the well-being of the community at large. If he be guilty without the palliation of mental infirmity, certainly the severest penal code—with the single qualification of cases of murder in the first degree,—can ask nothing more than this. If, on the other hand, he was at the time laboring under mental derangement, in no other way can the extent of his responsibility be accurately determined, and the proper degree of discipline adjusted. For this great question of sanity or insanity can really be only determined by those to whose daily and hourly care the convict is committed, and who have thus full opportunity of inquiring into his antecedent as well as his present condition. 'Thus,' to adopt the language of a late very intelligent commentator, 'except as regards the curative course to be adopted, on our view of the case, the subtle line of distinction which there have been so many abortive attempts to draw, between criminal and non-criminal lunatics is of no practical importance, and the unavailing search, unless as a matter of metaphysical speculation, may be abandoned as unnecessary. In either case, the person concerned, whether called a lunatic, a criminal lunatic, or an ordinary criminal, should be so placed as to put it out of his power to inflict further injury, and to afford the most likely means for his cure.' And thus, also, not only will the sanctions of human life and property be protected from the recurrence of those monstrous acquittals, by which, under the plea of insanity, the most dangerous criminals are suffered to run at large, but the interests of humanity will be subserved by a proper discipline, as well as a just classification, of those whose accountability is diminished or destroyed."

Mr. Wharton's work cannot fail to interest the general as well as the professional reader. His style is clear and forcible, the matter treated of affects us all more or less nearly, and is throughout illustrated by cases of thrilling interest. We warmly recommend it to our readers.

A Practical Treatise on the Diseases, Injuries, and Malformations of the Urinary Bladder, the Prostrate Gland, and the Urethra. By S. D. Gross, M.D., Professor of Surgery in the University of Louisville, &c. Second Edition, Revised and much Enlarged. Philadelphia: Blanchard & Lea. 1855.

The very flattering reception with which the first edition of the above work was received by the profession, both at home and abroad, renders it unnecessary for us to say anything of its merits. The present edition has been enriched by upwards of two hundred pages of additional matter, which are dispersed throughout in the form of chapters, sections and paragraphs, imparting

to it somewhat of the aspect of a new treatise. It is now quite a large book, comprising more than nine hundred pages; this, however, is the less to be regretted, as the author has been enabled by its increased size to enter much more satisfactorily into the detail of the diseases and injuries of which it treats than otherwise he could have done. As it now stands, we consider it the most valuable and thoroughly complete treatise on diseases of the urinary organs in the English language. It is in every respect a work to be proud of. The vast amount of information contained in its pages, its clear and simple style, and the sound judgment which presides in all its teachings, leave nothing whatever to be desired by the reader.

The work is gotten up in excellent style by the enterprising publishers, and is embellished by one hundred and eighty four illustrations.

Mineral and Thermal Springs of the United States and Canada. By JOHN BELL, M.D., author of "Baths and Mineral Waters;" "Baths and the Water Regimen;" "Lectures on the Practice of Physic," &c. Philadelphia: Parry & M'Millan. 1855.

We need only draw the attention of our readers to the above useful and interesting little work to secure it a favorable reception. Dr. Bell, it is well known, has devoted much time and reflection to the subject of baths and mineral waters, and their effects upon the human system. The present volume, though but a small one, fully sustains the character for judgment and knowledge of his former writings. A great deal of necessary and agreeable information is contained in its pages, and it is equally well adapted to the comprehension of the general and professional reader.

"The want of a manual in which travellers for curiosity and pleasure, and invalids in quest of health, might learn where to go, how to go, and what to find in relation to the Mineral and Thermal Springs of our country has been generally felt. Physicians, too, have wished for a work to which they could refer for information respecting the physical and chemical properties and medicinal virtues of the several springs. There are, indeed, some published accounts of particular springs, and even groups of springs, as, for example, of those of New York and of

Virginia, of which free use has been made in the following pages. But, with the exception of a work by the author issued twenty-five years ago, no attempt has hitherto been made to collect and arrange methodically the numerous separate and scattered histories and descriptions of the different mineral and thermal springs of the United States, as has been done for those of Great Britain and Ireland, of France, of Germany, and, in a more restricted manner, of Italy."

"It contains notices, more or less full, of one hundred and thirty springs and groups of springs belonging to the United States. If account were taken of each separate spring of the several groups, which is marked by distinctive properties, the number would exceed two hundred. Of those described, there are, as will be seen in the tabular view presented in the appendix, about thirty of the thermal class, a great majority of which must be quite new to most readers."

We advise travellers to our various watering places to provide themselves with a copy of the above volume, as there are very few of them who will not derive advantage from its perusal. The directions for drinking the different waters, and for bathing, are full and judicious, and may be understood by all. The book has a copious index.

A Pocket Formulary and Physician's Manual, embracing the Art of Combining and Prescribing Medicines to the Best Advantage; with many Valuable Recipes, Tables, &c. By THOMAS S. POWELL, M.D., of Sparta, Georgia. Savannah: W. Thorne Williams. 1855.

This little work is one of the best arranged of its class, and will, we are confident, be found especially adapted to the wants of the American practitioner. The author is one of the most respectable and experienced physicians of our Southern States, and is thoroughly qualified for the task of preparing a "Pocket Formulary," adapted to the occasions of the profession of our country.

Medical Lexicon, or Modern Terminology; being a Complete Vocabulary of Definitions, including all the Technical Terms employed by Writers and Teachers of Medical Science at the present day. Third Edition. By D. MEREDITH REESE, M.D., &c. New York: S. S. & W. Wood. 1855.

That this useful little work has supplied a want of students, is shown by its having reached a third edition. As a vocabulary of

definitions, of which the briefest possible is given in every instance, it is well fitted for the purpose it is intended for—a help to students and young practitioners.

THE MEDICAL EXAMINER.

PHILADELPHIA, AUGUST, 1855.

MEDICAL NEWS.

The July number of the American Medical Monthly contains a very full and interesting report of the proceedings of the New York Academy of Medicine at their June meeting. The Committee on Dr. Green's paper on "Injection of the Bronchial tubes," after reading the minutes of their sessions, made their report, the conclusion of which is as follows:—

1st. Catheterism of the air passages dates its history from the time of Hippocrates.

2d. The best evidences of the passage of an instrument into the air passages, are the rational signs.

3d. The facility of the operation depends upon the kind of instrument used; the tube having a large curve being best, and the sponge probang least adapted to enter the trachea.

4th. That there is no reliable evidence, in the opinion of your committee, that the *sponge probang* has been passed through and beyond the vocal chords.

5th. That there is no positive evidence that an instrument can be passed at will into the right or left bronchial divisions.

6th. That in the great majority of instances where injections are supposed to have been thrown into the lungs, through a tube, they have passed directly into the stomach.

7th. That as regards the utility of injections of nitrate of silver into the lungs, the facts thus far developed, in the experiments of your committee, lead them to regard the operation as one fraught with danger, as well as difficulty.

In submitting the above Report, the committee beg leave to tender their thanks to Prof. Green, and to Isaac E. Taylor, Visiting Physician of Bellevue Hospital, who kindly aided in furnishing subjects, and in making the experiments which are appended, and which form the basis of this Report.

WILLARD PARKER, M.D., *Chairman.*
JOHN O. STONE, M.D.,
ISAAC WOOD, M.D.

At an adjourned meeting of the Academy, held June 20th, Dr. Parker stated that since the last meeting of the Academy, the Report had been signed by Dr. Metcalfe, and thus had upon it the names of four of the committee (Parker, Wood, Stone, and Metcalfe.) He had received a note from Dr. Anderson signing the first part but not the second, "that is, the *cui bono.*" Dr. Stevens was present, and would answer for himself. The note of Dr. Anderson, kindly furnished to us by the writer, is as follows:

NEW YORK, *June* 14*th*, 1855.

WILLARD PARKER, M.D.:

DEAR SIR:—I still entertain the opinion I expressed at the last sitting of the committee, on the paper of Dr. Horace Green; and which I also repeated to you on the following morning; that the second division* of the matter referred to the committee had not received that investigation which would enable them intelligibly to report upon it. You will please receive this as my signature to the *first* division of the Report.

With very great respect, yours,

JAMES ANDERSON.

Dr. A. H. Stevens said that he had prepared a report, and with permission would read it.

It having been urged that the minority Report of Dr. Barker should first be read, Dr. McFarland, of Williamsburgh, stated that Dr. Stevens' was a part of the majority report, and therefore ought to be first read.

The president requested Dr. Stevens to proceed.

DR. STEVENS' REPORT.

The undersigned, one of the committee appointed to report on the subject of medicated injection into the trachea, as performed by Prof. Horace Green, not having had the opportunity to witness all of the facts in relation to this subject, that have come under the notice of his colleagues, begs to submit this his separate report. He was present at two meetings only, at Prof. Green's office, and witnessed, in addition to some very skilful applications of caustic solutions to sinous passages in the fauces, repeated introductions of the sponge probang, of the hollow tube, and of nitrate of silver injections through it.

As regards the question of the possibility of the introduction of the probang into the trachea, he did not see enough to enable him to consider the practicability of such introduction as a proved fact. But of the practicability of passing a catheter into the trachea, he was confirmed in his previous belief, that it admits of no question whatsoever. It was moreover proved that the injection of a solution of nitrate of silver in quantities equal to two fluid drachms is quite practicable with ordinary skill. In two experiments performed in his presence by Prof. Green, it was not followed by alarming symptoms, or, so far as he knows, dangerous consequences; a result quite different from what *à priori* reasoning had prepared him to anticipate. If further experience

* The utility of Injections of Nitrate of Silver into the Air Passages.

should prove its entire safety, such experience, on a very extended scale, and by numerous observers, can alone determine its therapeutic value. But those who may incline to make such experiments, will doubtless remember that a solution of two drachms of nitrate of silver, of the strength stated to have been employed, ℈jj. to ℥j. of water, would give ℈ss. of the solid caustic; enough to make an eschar through the cutis of one inch in diameter. Analogy would lead to the conclusion that so large a quantity, expending its whole force upon the tracheal, and such parts of the bronchial membrane, as it came in contact with, would be likely to induce inflammation of a grave character. The quantity of caustic actually brought into permanent contact with a stricture of the urethra is a very small fraction, probably not one-twentieth part of a grain. A stick of caustic, weighing only four or five grains, may be used daily for months, with scarcely a perceptible diminution of its bulk, even in hospital practice.

In regard to the question of the practicability of directing the solution to a particular part of the bronchial tubes, or into any cavity connected with them, at the pleasure of the operator, the reporter has seen nothing to lead him to an affirmative answer.

All which is respectfully submitted.

ALEX. H. STEVENS, of the Committee, &c.

We regret that our limits forbid our copying anything but the following from Dr. Barker's minority Report:

"Contenting myself, therefore, with the positive assertion that I have reliable evidence that the sponge probang has in many instances "been passed through and beyond the vocal chords," I deem it no part of my duty, as a member of *this* committee, to bring that evidence before the Academy. The committee were appointed "to enquire into and investigate the treatment proposed by Dr. Green in his Paper," read before the Academy Dec. 6th, 1854. That treatment is the injection of nitrate of silver into the bronchi, and, "under favorable circumstances," into tubercular cavities.

The following are Dr. Barker's conclusions:

In conclusion, the minority of the committee would suggest, for the acceptance of the Academy, the following propositions:

1st. Direct medication of the lungs by means of catheterism of the air tubes, was first proposed and carried into effect by our associate member, Dr. Horace Green.

2d. The operation may be performed by the dexterous surgeon with ease and facility, and with perfect safety to the patient.

3d. The results of this method of treatment, whether it has been employed in bronchial affections or in the commencement of tuberculosis, have already afforded the most gratifying indications that practical medicine will be greatly advanced by this discovery.

B. FORDYCE BARKER, of the committee.

Messrs. Lindsay & Blakiston have now in press and will shortly issue, "A Work on Epidemic Cholera, embracing its Characteristics in

General; its History and Cause; Local Preferences, and non-Contagiousness; Symptomatology, Pathology, &c." By HORATIO G. JAMESON, M. D.

At a special meeting of the Northern Medical Association, held July 16th, 1855, in reference to the death of Dr. M. B. Smith, the following preamble and resolutions were adopted:

Whereas, It has been announced to the Association that our presiding officer, Dr. Moses B. Smith, "was called from works to rewards" on the morning of the 15th inst., and it appears fitting for us on this occasion to express our sentiments on account of the bereavement, and our opinion of his high worth: therefore

Resolved That in the decease of our venerable and lamented President, Dr. M. B. Smith, (who was one of the earliest members in our organization, and most assiduous in his attention to the welfare of the Association, in every respect,) we have sustained an irreparable loss.

Resolved, That we most respectfully and sincerely tender our warmest sympathy to his family in the present affliction.

Resolved, That as a last token of our regard to his departed worth, we will attend the funeral to-morrow afternoon in our associate capacity.

Resolved, That a copy of the above proceedings, signed by the Vice-President and Secretary, be sent to the family of the deceased.

Resolved, That a copy be also sent to the editors of the Medical Examiner and Medical News, with the request to publish.

JOHN RHEIN, Vice President.
J. HENRY SMALTZ, Sec. pro tem.

RECORD OF MEDICAL SCIENCE.

A Small Calculus Removed by the Lateral Operation of Lithotomy. By PAUL F. EVE, M. D., Professor of Surgery, Med. Dep. Uni. of Nashville.—From the statistical report of the principal operations performed in the London hospitals during the month of January, 1855, we find the following case re-published in the Medical News of Philadelphia: "A healthy child, aged 4, under the care of Mr. Athol Johnson, in the hospital of children. There had always been great difficulty in detecting the stone. At the operation it was found to be too small to be grasped by the forceps, and was finally removed by the scoop-end of a director and the finger. It weighed only *five grains.* The child recovered well."

My friend, Prof. Wm. H. Van Buren, of New York city, reported in the Medical Times for May, 1853, the case of a child 3 years old, who from birth labored under symptoms of stone. Some difficulty was

experienced in detecting the calculus, but by the lateral operation, one weighing *nine grains* was successfully extracted.

"Mr. Martineau, of Norwich, England, is said by Crosse in his prize essay on Urinary Calculus, to have extracted a calculus weighing only *ten grains* from a boy 13 years old; and this is spoken of as being the *smallest probably ever removed by operation.*"

In the 1000 extracted by the late distinguished Dr. Physick from Chief Justice Marshall, of Virginia, some, of course, were represented as exceedingly diminutive—comparable to pin-heads. In my own collection of 157, the smallest single calculus weighed *eleven grains;* but when multiple, some weighed only a grain or two.

I recollect a case, some years ago, in which I was called by the attending physician to relieve difficult micturition. As the catheter entered the bladder, I felt pretty certain it had encountered a rough foreign body at its neck. The patient was now prepared for lithotrity, as he had an ample urethra and good condition of the bladder for this operation. But by no manipulation with instruments, could a calculus be again detected. A few days afterwards, he brought me a stone, about the size of a small grain of coffee, which he had passed in urinating.

The case now reported is also that of a boy, 4 years of age, who had experienced symptoms of stone in the bladder for the past ten or twelve months. Its existence was detected by the sound about four months before the operation.

The child being evidently of a scrofulous habit, and having, too, recently passed worms, was put under treatment; and at the end of ten weeks was supposed to be prepared for lithotomy. Placed under the influence of a combination of ether and chloroform, no one now present could be certain of touching the calculus, and the operation was deferred.

Two months later, April 21st, the distressing symptoms of a foreign body in the bladder still persisting, preparations were again made for its removal. As the grooved-staff entered this organ, it apparently pushed the stone from its neck; but by no subsequent manipulation, either with it in my hand or in that of others, could a *click, clink,* or sonorous sound be elicited. Satisfied that I had again touched a rough foreign body, and which was confirmed by Dr. Briggs, we proceeded to perform the bi-lateral operation. As even the smallest size *double lithotome caché* of Dupuytren was deemed too large for our little patient, one manufactured here for the purpose was employed. The blades were, however, found too slender to divide the parts with facility and certainty, when this instrument was laid aside, and the lateral section made with a scalpel. A very small calculus was now detected in the bladder, which could not be seized with forceps, but was readily extracted with a finger *It weighed eight grains.* The child had a very rapid recovery. In three or four days he was about the house.

In these instances there was not substance or material enough to produce the metallic ring or click when the sound touched the urinary concretion. This diagnostic symptom, the most pathognomic of vesical calculus, is absent in these cases, and the operation must therefore be

performed under peculiar circumstances. Neither can the finger in the rectum, on account of the small size of the stone, add much or anything in making out definitely the correct diagnosis. The surgeon has chiefly to rely upon the *tactus eruditus* in these cases.—*Nashville Jour. Med.*

Exfoliation of the Mucous Membrane of the Uterus; treatment by canula in the os uteri, etc. Under the care of Dr. TYLER SMITH.

Cases of what are styled "membranous menstruation," with the excessive pain attending this affection, are not uncommon in general practice, yet it is only lately that they have come to be properly understood. The older pathologists, as Baillie and Wm. Hunter, believed dysmenorrhœa to depend on an inflammatory condition of the uterus at the period of menstruation, and that even in the virgin uterus an organized substance, resembling the decidua, was formed by the lining membrane, and thrown off, when a small organized mass, the shape of the cavity of the uterus, was passed. Whether in the married or unmarried condition, it was known in common language as a "mole."

Dysmenorrhœa sometimes takes place from the very commencement of menstrual life, and there is good reason for believing that it depends on the small size or strictured condition of the os uteri. The menstrual fluid, after it is formed or while forming, cannot readily escape; distention of the organ speedily follows, which, by exciting the contraction of the uterine fibres, produces pain almost simulating that of labor. Even the action of the abdominal muscles is called into play, and many cases of what are termed "spurious pregancy" may be very possibly explained in this manner. It is believed, too, that women thus affected rarely, if ever, conceive or bear children, the normal healthy function of the uterus being interfered with, as well as the woman's health reduced by the constant suffering and pain. Of all the means of cure hitherto tried, dilatation of the canal of the cervix uteri seems to be the best, to which more recently has been added the introduction of a silver canula, as tried by Dr. Tyler Smith.

When in 1846 Professor Simpson, of Edinburgh, announced that the membrane expelled in certain cases of dysmenorrhœa was not simply a fibrinous or inflammatory exudation, the result of some change in this organ, but consisted rather of "exfoliation or detachment of the mucous membrane of the uterus itself," the obstetric world, according to Dr. Tyler Smith, as he explained to his class, was somewhat startled from its propriety, and ever since that time, when the matter has been referred to, it has generally been with strong expressions of doubt and incredulity. Obstetric practice has been hitherto rather undeservedly under a cloud in London, and few opportunities have been afforded to test the matter. We are not aware that any researches bearing directly upon Dr. Simpson's discovery have been published in London, so that the following case, abridged from the notes taken in St. Mary's may be instructive:—

M. D——, aged thirty-two, twice married, but without children, was admitted April 20th, suffering from dysmenorrhœa and the discharge of membranous matter at each monthly period. The history of the case,

as taken by Dr. Vernon, was as follows :—She was first married at the age of sixteen, and before this time had menstruated healthily. After marriage she began to suffer from menorrhagia, which she supposed to have been caused by excessive intercourse. This went on, and ended in membranous menstruation, accompanied by profuse sanguineous discharge. She continued to suffer in this way during the lifetime of her first husband; but seven years after her marriage she became a widow. She now slowly recovered her health menstruation becoming less painful, and the dysmenorrhœal membrane disappeared altogether. She remained unmarried for several years, but married a second time about two years ago. Six months after this marriage, she began to suffer pain again during the menstrual periods, and the characteristic membranous shreds reappeared in the discharge. She now for the first time had internal hæmorrhoids, with fissure of the rectum; blood was occasionally passed by stool; and defecation, except under the influence of laxatives, caused great pain; micturition was also painful. In the intervals of menstruation she complained of leucorrhœa, the discharge being sometimes of a brownish color. Occasionally severe pruritus was present. She had been a patient at several public institutions without obtaining material relief.

At the end of last year, when she first became an out-patient at St. Mary's Hospital, her health was much broken by menstrual losses, the dysmenorrhœal pain and the leuconhœal discharge. At this time the membranous matter came away in flakes of considerable size, the largest generally passing on the first days of menstruation. The greatest pain was suffered on the first day of the discharge and the two or three days preceding its appearance. On examination, the uterus was of the natural size, and the only thing tobe remarked was a very contracted state of the os uteri, scarcely admitting the end of a probe into the canal of the cervix. Various remedies were used with the effect of moderating the leucorrhœal discharge and improving the general health. The os uteri was on several occasions dilated mechanically, but it was soon found to return to its former state of contraction. On one occasion Dr. Smith introduced into the cervix uteri a small silver canula about three quarters of an inch long, with a view to its remaining in the canal during a catamenial period. She menstruated while wearing this instrument, the discharge coming away freely in a granular instead of membranous form, and she suffered much less pain than usual. She herself stated that she had not been so free from pain at any month since the time the disorder reappeared after her second marriage. Some days after menstruation had ceased, this canula was taken out, and at the next two or three monthly periods the pain and membranous discharge returned as before. Dr. Tyler Smith now admitted her into the hospital, with the view of watching the case more closely, and ascertaining, if possible, the exact nature of the discharge. Shortly after admission menstruation took place, and the membranous flakes were carefully collected and examined with a lens and by the aid of the microscope. The largest membranous flakes exceeded the size of a shilling, and were about the eighth of an inch in thickness. When examined in water, they presented on one side a

smooth surface, and on the other side the surface was flocculent and irregular. A vertical section showed the membrane to consist of a fibroid layer, in which was imbedded an abundant cell-formation, made up of multitudinous nuclei and celloid particles. From the free or smooth surface, numerous villi projected, while from the flocculent surface, long tubular glands could be seen passing downwards. These glands had a basement membrane, surrounded by an outer thin coating of nuclei and fibroid tissue, and were lined with epithelium. The tubes of the glands were full of cylinder epithelium, nuclei, and granular matter. The tubular glands could be seen with the naked eye, and, with the villi of the surface, were characteristic of the uterine mucous membrane. There appeared to be no doubt that the membranous flakes were the mucous membrane of the fundus uteri, cast off *in toto*.

This case, then, strongly supports the pathological views of Dr. Simpson. An intelligent young German physician, Dr. Spiegelberg, of Gottingen, who saw this case with Dr. Smith, informed us that the celebrated Virchow, of Wurzburgh, and Professor Heschl, of Olmutz, formerly senior assistant to Rokitansky at Vienna, had examined these exfoliations, and found them also to consist of detached mucous membrane.

On the approach of the next monthly period, after this examination of the membranous formation, the silver canula was again introduced, with the effect of diminishing the pain as before, and the discharge also contained much less flaky matter. The tube was allowed to remain *in situ*, and a second period has since been passed with marked diminution of pain, and alteration in the character of the discharge.

We have given an account of the present case because of its intrinsic interest, and to note the relief afforded by keeping the os uteri open with the canula. It remains to be seen how far the benefit derived in this way will proceed, but the use of such a means is certainly rational in a form of disease which obstinately resists ordinary modes of treatment. In other cases of membranous menstruation treated at St. Mary's, Dr. Smith has tried local abstraction of blood, counter-irritation, mild mercurialization, iodism, tartar emetic, (given at the periods so as to keep up constant nausea,) opiates, preparations of steel, cubebs, &c. &c., without arriving at any certain means of checking this troublesome disease. We ought not to omit to mention that in the case now under comment, full doses of camphor lupulin had been given with a view to their antiaphrodisaic effects.—*London Lancet.*

Epilepsy Cured by a Surgical Operation.

To D. M. Reese, M. D.

Sir—To follow the common path of life, and to do so tamely and quietly, is to meet the common-place acquiescence of the world; and how many die utterly unknown to the page of history, simply because they feared more the criticisms of the world than they wished to benefit mankind by prosecuting a course of thought and action which would lead to it.

To step aside from the ordinary walk in which the masses tread, is often attended with censure—gross and inflexible denunciation—vituperation, and all the other windy hosts of weapons, not to mention a subjectedness to the imputation of being called an unmitigated liar. Somebody has said, and was it not Sir Isaac Newton? "I see a man must either resolve to put out nothing new, or become a slave to defend it."

This article will advance something decidedly new to the medical literature of America, but in doing so the writer will not "become a slave to defend it," for if the world will not believe it, the world can have recourse to the other alternative, viz., "just let it alone." When medical men write, (and too many of them do,) it is either for the purpose of proving something beneficial to the world, or that they themselves are fools. Now, when men advance things to the medical world—if it even be consummate nonsense—some blockhead or other will believe it; and if he does, and acts accordingly, why there will be "work for the sexton." This is rather a practical way of talking to those who delight in theoretical attenuations, but we are eminently practical, yet know something about theory too, but not any too much. In presenting a fact, it is not always necessary to use circumlocution to make it appear a fact. We are well satisfied in our own mind, and we have become so by experience—an experience extended through a series of years in experiments that prove beyond the adumbrance of a doubt, *the way to cure a man of Epilepsy is to castrate him.*

When the writer was attending the school of Pathological Anatomy, in the City of Liverpool, he heard a learned professor say, in speaking of Epilepsy, that "persons have been known to recover from Epilepsy after accidents happening to them which rendered it necessary to remove one or both of the testicles." "But," he went on to say, "to do this voluntarily, and for the sole purpose of curing this intractable malady, is too cruel, and some how or other at variance with, and repugnant to, our feelings." He also added: "Those who are aware of this as a remedy for Epilepsy, and have omitted making publicity of it, have doubtless been influenced by such reasons as have already been mentioned." The next day after hearing the above, when walking on the "green common" in company with a Scotch student, Mr. McGavoc, now of the British Navy, the subject of Epilepsy was theoretically canvassed. Mr. McGavoc said: "I knew a man in Dumfrice that had Epilepsy—he was 27 years old—had it from the age of 12, till he was 24; at this age he took mumps—was badly attended, and caught cold—metastasis to the testicles took place, and a surgeon castrated him, and cured both the mumps and the fits." He said: "It is three years since he was castrated, and has not had a fit since."

He also said: "I knew a filthy boy of about 16, who fell through a bridge when crossing it on horseback; he mashed one of the *testes*, and it had to be taken out; after it was removed he never had another fit, and it is now 6 or 7 years since the accident happened." After the writer returned home to the United States, and commenced his professional career in Tennessee, he visited the plantation of a Mr. H——,

not many miles from Huntsville, Ala., who had a negro boy 14 years old, subject to attacks of Epilepsy. The writer, after examining the boy, asked his master if he was aware of the boy being fond of sexual intercourse. "Why, Dr.," said Mr. H——, "he has never been flogged more than 5 or 6 times in his life, and nearly every flogging has been for lechery. Sir, he is so bad on the little girls and *boys* that I often have threatened to "cut him." The writer then made known to Mr. H—— the evidences he had in favor of such a measure, which being acceded to, the operation of castration was at once performed, and the boy had no more fits, but has been perfectly sound ever since, and sold at the age of 20, 6 years after, for eleven hundred dollars.

Isaac T——, of Tennessee, had Epileptic fits from the age of 13 till he was forty-two; no remedy he could apply done him any good, till the writer castrated him. Anterior to this operation being performed, he was morbidly uxorious, to the extent of very great excess, and had two daughters. Nor did this operation upon Mr. T—— disqualify him for conjugal intercourse. His wife has had two sons within two years after the cure was effected. It is true, the sons did not resemble the daughters very strikingly! Mr. T—— did not fail to remark this; when he consulted the writer, by whom he was informed that certain operations upon the organs of generation produced certain other changes, only to be accounted for by invoking physiology and the psychological powers—he said it was perfectly clear to him, and that he understood it.

Three physicians to whom the writer has named his views concerning castration for the cure of Epilepsy, have adopted it, and each have been successful. Dr. White, of Tennessee, in 2 cases; Dr. Talbot, of Missouri, in 2; and Dr. Hacker, deceased, of Louisiana, in 1. Some may say that worms will produce Epilepsy, and that castration cannot cure worms. Now to such let us say, the Epilepsy of worms is not Epilepsy. Others will say that spiculæ of the skull produce Epileptic fits—neither is this Epilepsy. Nearly all kinds of fits, or such attacks of illness as neutralize the control of the voluntary system, are marshaled under the denomination of Epilepsy; but the writer holds, and he thinks he can show sufficient evidence to others, that a peculiar erethism of the ultimate nerves, of that plexus which governs the sexual system, can alone explain, as it is the only source of Epileptic fits. But as an explanation is not yet called for, it would seem unnecessary to offer it till it is. S. E. McKinley, M. D.

Irwinton, Ga. May 22nd, 1855.—*American Medical Gazette.*

[Are not women subject to epilepsy also, and would Dr. McKinley advise us to take out their ovaries: spay them? Masturbation and excessive venery, like other exhausting agencies, may occasionally, we have no doubt, cause the attack. When they do, which we believe to be seldom the case, the operation above proposed might prevent a return of the disease. That a man should be castrated, however, merely because he has epilepsy, is rather hard. It is well known that any serious

shock to the system, as for instance a fall from a height, a severe bruise, or wound, any disturbing agency in fact, frequently puts a stop to the fit for a long period; sometimes cures the disease; and this may be the explanation of the successful result in the above cases.—EDITOR.]

On the Use of the Pad in Varicose Ulcers. By R. BARNWELL, F.R.C.S. Assistant Surgeon at Charing Cross Hospital.

The result of some cases of varicose ulcer, treated on a plan which, though not new, is scarcely sufficiently well known, may be of interest. One case, the worst I have thus treated, will be sufficient. It occurred in the person of a poor woman, aged 58; and the ulcer on the ancle was deep, surrounded by blue hard edges, was extremely painful, and discharged, in considerable quantity, a thin pus. It had been kept bandaged, treated with various lotions and ointments, for two years, and the foot had remained so perfectly rigid, for fear of the pain on moving, that a partial anchylosis appeared to have taken place. The veins in the leg were varicose, but not extremely so.

Every application I could devise, every change in the treatment, appeared utterly useless. The woman would not go into an Hospital, where she might rest the limb, and perhaps have the vein obliterated by tying or caustic. I tried, therefore to find a substitute for that mode of treatment. Now the many veins on the back of the foot, and inner side of the leg converge into one trunk, the internal saphenous, which vein, with its radicles, is most frequently varicose; and I determined to apply a strong and constant pressure upon some part of that vein, to prevent the dilatation of those below, the blood finding its way through some other channel. The method used in this case was simply a firm pad, tightly fastened upon the vein, immediately beneath the head of the tibia, by two cross strips of plaster, which did not meet so as to surround the limb on the outer side. The leg was then firmly bandaged.

The effect of this treatment was almost immediate. The ulcer began to fill up, and the hard edges yielded. The pad was first used in the middle of November; by the end of February the ulcer had healed, and this while she was walking about and following her employment as a washerwoman. The other cases in which I have used this method of cure are naturally similar, and I have never found reason to dread any inconvenience whatever from the practice. A very simple instrument will, however, be found a more convenient method of compressing the vein than the cheap but rude expedient I have adopted among the poor.—*London Med. Times and Gazette.*

Two Cases of Hydrophobia recently observed in Smyrna.—In the month of September, 1853, a dog bit a man, 22 years of age, on a naked part of the calf of the leg, and on the same day bit a female, 20 years of age, on the hand. The man's wound was deep. No caustic was applied. It suppurated freely, and did not cicatrize for fifteen days. The girl's wound was so slight that it was scarcely perceptible six or eight

hours afterwards, when it was seen by a medical man, who touched it with nitrate of silver very slightly. The next day a young man was bitten in the hand, but the wound was immediately cauterized by the acid nitrate of mercury. The dog, being ill, was poisoned by strychnia. In April, 1854, eight months after the bite, the man first bitten was seized with unequivocal symptoms of hydrophobia, and died 70 hours after the symptoms declared themselves. On the 17th of April, 1855, twenty months after the bite, the girl also was attacked, and died in about 60 hours. The third person bitten has not yet suffered. The girl had not been aware that her bite might prove dangerous, and had had no fear of hydrophobia. Pustules under the tongue were looked for in the girl's case, but not found, although the arteries and veins of the part appeared congested. No unusual mode of treatment was practised. Dr. Macraith shortly alluded to three other cases he had heard of, showing that the disease was not unfrequent in Smyrna, and stated that a part of the coast of Asia Minor, opposite Rhodes, where hydrophobia was present in the days of Hippocrates, was still noted for the frequency with which it is met with in the present day.

Mr. Spencer Wells, having inquired of Dr. Macraith whether the symptoms in these cases had been preceded by pain in the bitten part, and received the reply that they had, in both instances, alluded to the propriety of excising the cicatrix, at any period after the bite, even after the commencement of the symptoms of hydrophobia He said pain in the cicatrix was so commonly observed, that, although it was difficult to suppose that a poison could be mechanically imprisoned in any part of the body, it appeared advisable to perform excision, if only for the purpose of giving confidence to the patient. In the only case of hydrophobia he had ever seen this was done, and the symptoms certainly abated for a few hours afterwards.

Mr. Eddowes said that in tetanus he would also perform excision of any injured part, and had seen the practice of great use, accompanied by the endermic application of morphia.

Mr. Halke alluded to the state of the kidneys in hydrophobia. He had seen a case last year in King's College Hospital, in which great diminution of urine, and finally suppression, took place. Urine drawn off by the catheter was smoky, highly albuminous, and largely charged with free epithelium and epithelial casts. The kidneys, at the post-mortem examination, presented all the appearances of acute desquamative nephritis. In another case, at Charing Cross Hospital, the kidneys presented similar appearances.

Dr. Leared suggested that possibly the diminution in the quantity of urine might depend upon the fact that no water was imbibed.

The Chairman inquired if any account could be given of the manner in which the dog acquired the disease. Dr. Macraith replied that it was a sporting dog, and nothing could be discovered as to inoculation.

Mr. McDonnell related a case he had seen to prove that the bite of a dog simply enraged, and not suffering from hydrophobia, might give

rise to the diaease. In this case the bite of a spaniel that continued well was followed by fatal hydrophobia.

Mr. Macleod said that this was a well known and established fact.

Mr. Spencer Wells doubted the correctness of these statements, and thought that a dog must be suffering from this specific disease before he could convey it to the human subject. He might have it mildly, (just as a person with but a few spots of small-pox might communicate a severe form of disease to another person), and recover. In the case he had seen, inoculation was distinctly traceable. It occurred in Malta, where the disease had been unknown for upwards of thirty years, and it was only after considerable trouble that it was found that a dog had arrived in a vessel from Gibraltar that had died of hydrophobia, after biting another dog, that had bitten a cat, whose bite had proved fatal to a woman after an interval of about six weeks.—*Ibid.*

Cutaneous Nævi cured by the application of Iodine paint. By S. Edwards, M. D., Physician-Accoucheur to the Samaritan Hospital for Women, etc.—During the past twelvemonth I have met with two cases of cutaneous nævus in infants, which have been most satisfactorily and completely eradicated by means of the external application of iodine paint.

The first instance in which I was induced to employ it, was for a nævus unfortunately situated on the side of the neck of a female infant. At birth it appeared simply as a small, red shining spot, which in three months increased to the size of a fourpenny piece. The mother of the child at this time positively refusing to have any escharotics employed, fearing that it might give rise to a permanent and greater deformity, I recommended astringent and cold applications to be applied constantly, and this was kept up for some time, but with no good result. The nævus at the end of ten months had acquired additional size, and was observed to become redder and a little more elevated, whenever the circulation was increased by crying, etc. The parents still refusing any of my former suggested remedies, or even of vaccination, "until it got worse," I recommended the use of iodine paint, which was regularly employed by gently painting over the surface with a camel's hair pencil every alternate day, occasionally leaving it off for three or four days when the skin was very irritable and rough. Under this treatment I was pleased to find that the growth of the nævus was arrested, became smaller and mottled, and finally disappeared; a speck or two alone being visible to mark its former site.

The second case was very similar; it occurred in a little boy nearly two years of age. The nævus was about the size of a shilling, but slightly elevated, and situated on the abdomen, and had gradually but very slowly, increased since birth. No treatment had been employed, the Physician who attended the mother of the child, having advised nothing to be done unless it increased. The tincture was commenced in September, 1854, and was continued more or less up to last month

when the disease had disappeared, leaving scarce a trace of the mischief.

I know not whether others may have made trial of this treatment, but its success in these two cases has induced me to draw attention to it, as it is a plan so simple in its character that I can see no objection to its employment. In neither of these cases did it produce fever, or, in fact, any effect upon the general health. It is difficult, of course, to decide what might have been the result had these cases been left to themselves without treatment. I have seen several that in the course of time spontaneously disappeared; but still the fact that each of the above cases had gone on increasing up to the commencement of the treatment, and then began shortly to recede, and finally disappeared, must induce the belief that some considerable merit is due to the iodine, and that it deserves a more extended trial.

The many plans that have been proposed and adopted for producing inflammation in, and consequent destruction of, the nævus, are mostly attended with serious objections—*caustics*, by occasional extensive ulcerations, serious hæmorrhages, and by exciting not unfrequently considerable constitutional irritation. *Vaccination* has, I believe generally failed, and when successful has the disadvantage of leaving the ordinary cicatrix. The seton, needles, the injection of fluids, and lastly, and perhaps the best of all, the knife, have an aspect of seriousness to the parents, and are all fraught with occasional serious consequences. The latest plan which has been suggested, is that of Mr. J. B. Brown, who has produced pustules on the cutaneous nævus by means of tartar emetic ointment. Besides the almost certainty of a larger or smaller cicatrix being left, in one of his cases it occasioned very serious slough- of the neighboring parts; objections to its employment about the face and neck of a very decided character.

Under these circumstances, I feel desirous of drawing attention to the above examples, that others may put to the test the value of iodine in these troublesome malformations of the skin, and which, if they would kindly give me the result of their trials, I should esteem it a favor.—*Medical Times and Gazette.*

Removal of Metals from the System by Galvanism. By G. Huff, M. D., Lexington, Kentucky.

To the Editors of the New York Medical Times:

Gentlemen—Having experienced the beneficial effects of galvanism in extracting metallic poisons from the human organism, and believing it to be a subject of much interest to the profession, I now place at your disposal a report of my experiments.

Very respectfully yours, G. Huff.

Case I.—Mrs. W——, aged 27 years, of lymphatic temperament, with auburn hair and white skin, had been under treatment for diseased spine fifteen months. During this time she had taken very large quantities of mercury, which, her subsequent medical attendant stated, produced paralysis of the lower extremities.

I was called in consultation by the advice of her physicians, and it was decided that she should be put under treatment by galvanism. Her physicians having thrown upon me the entire responsibility of the case, I took charge of her; and one day, while making an application of this potent agent to the spine, the feet having been placed in a metallic bathing-tub with acidulated water, her husband suddenly called my attention, exclaiming at the same time, "See the mercury!" On making an examination, I found several globules of metallic mercury lying on the bottom of the tub. I continued this (electric) treatment a long time, and she ultimately recovered, and now enjoys the powers of locomotion most perfectly.

Case II.—Mr. B——, aged 40 years, of nervous temperament, with dark hair, white and thin skin, had been treated for syphilis for a long period, and had been repeatedly salivated, from which he had suffered severely in the joints. The capsular ligament was so much elongated as to cause luxation of the head of the *femur*; separation of the *carpus* of each hand had taken place, and the metacarpal joints of the fingers were very much enlarged. He had been under treatment of physicians who stood deservedly high in the profession, and had visited warm springs in Arkansas by their advice. At this time he could scarcely move with crutches, even with the help of two attendants which he took with him. He remained there one winter, and returned without having obtained any relief. His friends then advised him to apply to me, and, with the consent of his physicians, he did so. On examination of his case I concluded to treat him, and commenced with warm baths, which invariably left him worse, the joints becoming more stiff and painful, and with less mobility. Believing that the remote cause of this aggravation of his disease was the presence of mercury in his system, I was induced to attempt to extract it. To accomplish this, after having placed him in a porcelain bathing-foot tub, with acidulated water, and a metallic plate beneath his feet, I completed the circuit, and after the lapse of twenty minutes I discovered a light-white precipitate, and the impress of his toes left on the plate of a light bluish color, with silvery lustre. I repeated this operation several times, and then commenced the galvanic treatment for rheumatism, and infused iodine into the joints in order to produce absorption of abnormal secretion that had formed there. From this time he commenced to improve, and went on improving without a relapse. All the joints have now recovered their normal condition, with the exception of the left hip-joint, the femur of that side now remaining seven-eighths of an inch below the right, although it has ascended three-eighths of an inch during my treatment; his general health has very much improved; in fact, he says it is now as good as it has been at any period of his life.

Case III. Mrs. N——, aged 28 years, of bilious temperament, small size, hair and eyes black, of a very high order of intellect. At the birth of her second child there was very profuse hæmorrhage, and much inflammation of the uterus was superadded in consequence of medicines having been imprudently given by her physicians to facilitate labor. For the purpose of suppressing the hæmorrhage and restoring the uterus

to a healthy condition, sugar of lead was given in small doses, and its use continued a long time. This treatment resulted in *lead palsy* (the total loss of muscular contraction of the extremities.) In order to extract the lead from her system, I commenced the treatment by galvanism in the same manner as in the foregoing case, and with the same results, except that the precipitate was of a dark grey color, and the impress of the toes left on the plate was of a darker hue. When the paralysis was nearly removed, partial amaurosis set in, and ultimately became total. I treated this without benefit, although I think the treatment has not been fully tested, as she was obliged to return home, in consequence of domestic cares, sooner than I anticipated.

Lexington, Ky., May 8th, 1855.

[The preceding communication contains results which will doubtless be novel to most of our readers, and which would seem to promise to be of value in a therapeutic point of view. It derives additional interest from the fact that, at the meeting of the Imperial Academy of Medicine of Paris, held January 29, 1855, a note was presented from MM. Verguès and A. Poey, on *the new application of electro-chemistry to the removal of metals from the system.* We extract the following account of the disease and process from the *L'Abeille Medicale*, 15th Feb., 1855:—

M. Verguès, who had on the back of his hand an ill-conditioned ulcer, caused by the introduction of metallic substances in the process of gilding and silvering by galvanism, on plunging his hands into an electro-chemical bath at the positive pole, found to his great surprise, a metallic plate in contact with the negative pole, covered, at the end of a quarter of an hour, with a thin layer of gold and silver. A few baths proved sufficient to radically cure the ulcers, which had previously resisted the most active means. The first experiment was made at New York, the 16th of April, 1852, and was followed by several others, which had led to the introduction of a new therapeutic mode of removing metals from the system.

The patient is placed up to the neck in a metallic bathing tub, isolated from the ground, and made to rest in a horizontal position upon a wooden bench, the whole length of the body, which is to be also isolated from the bathing tub. The water is to be acidulated with the nitric or the hydrochloric acid for the removal of mercury, gold, and silver, and with sulphuric acid for the removal of lead.

One extremity of the bath is put in contact with the negative pole of the pile by means of a screw, and the patient takes hold of the positive pole sometimes with the right hand and sometimes with the left. Tho arm is held up by supports in contact with the seat. The extremity of the positive conductor which the patient holds is armed with a massive iron handle, wrapped around with linen, to diminish the calorific action of the current, which is very powerful, and which, without this prevention would burn the hands.

The patient being thus placed, the positive current enters either by the right or left arm, circulates from the head to the feet, and is neutralized at the negative pole, on the sides of the bathing tub. Being isolated from direct contact with the negative pole as well as from the ground,

the electric fluid radiates from the body into the bath, forming a multitude of currents from the entire surface of the body, which, after having traversed the internal organs and even the bones, neutralize themselves upon the negative side of the bathing tub.

They say that they have thus withdrawn from the femur and tibia of a patient a large quantity of mercury, which, according to the opinion of several physicians, had remained there fifteen years.

The paper was referred to a commission, consisting of MM. Dumas, Rayer, and Cl. Bernard.

The *Virginia Med. and Surgical Journal*, for May 1, 1855, contains also (in addition to the above) an account of an experiment made before the members of the Faculty of Medicine of Havana, in which a similar result followed the use of the same agent.

The metallic spots formed by this process are said to vary in size from that of the head of a pin to the size of a pea, while some are microscopic.

In a letter received from Dr. Huff, subsequently to his communication, he says that he had never seen the process, nor read any work respecting what he calls "his method of extracting metals from the human system." He says, "my mode is constantly demonstrated by the ordinary course pursued for the electrolysis of metallic salts, by those engaged in electrotyping and electroplating." He speaks also of the solution of urinary deposits in the bladder by galvanism without any *difficulty or pain*, and promises to communicate some interesting results on the subject.

The report of the Imperial Cabinet of Medicine has been copied in different journals in our country, and has been hailed as embodying a valuable contribution to therapeutics; and if future results confirm the hopes thus entertained, the paper of Dr. Huff will be invested with additional interest.—*Eds. N. Y. Med. Times.*

On the Anthelmintic Action of Sulphate of Quinia. By Dr. PROSPER DELVAUX, Fellow of the Faculty of Medicine of the University of Brussels.

During the last three years I have proved the efficacy of sulphate of quina as an anthelmintic. Some days after the administration of this salt in the intermittent fevers of children, the parents came to announce to me the cure of the fever; but in a great number of cases, the little patients had had motions, followed by the expulsion of intestinal worms.

Thenceforth I asked myself, if sulphate of quinia had not anthelmintic properties? I then gave it to children affected with worms, and my trials were crowned with success. Every time that I made use of this salt as an anthelmintic it produced this effect, which I have verified in a great number of cases.

So early as 1764, Professor Van Doeveren of Groningen, reported two very interesting observations on the anthelmintic property of Peruvian bark.

The first case was that of a child, aged 12, affected with tænia. Pur-

gatives, calomel, assafœtida, &c., had been tried, but in vain. At last, an ounce and a half of Peruvian bark was given in four days. After having taken the powder, the patient passed an entire tænia with the head.

In the second case, the patient was a young girl laboring under fever. She took an ounce of powdered Peruvian bark, made into an electuary with simple syrup. Three round worms were expelled.

In a great many cases, adds Van Doeveren, physicians have given this febrifuge with the single idea of subduing fever, and without having the least suspicion of worms, and nevertheless it has brought them away. Heister combined bark with mercury in his anthelmintic electuary, probably because he suspected the vermifuge power of the former.

I have collected upwards of forty cases of children affected with lumbricoid ascarides who have been radically cured of this affection with sulphate of quinia. The salt usually produces, at the end of twenty-four or thirty-six hours, several liquid motions containing these entozoa.

The sulphate of quinia is also most effectual in removing the ordinary ascarides (oxyures vermiculares.) As is well known, these parasites are lodged in the fæcal matters in the rectum, sometimes in the colon. They appear to imbibe a remnant of the chyle which serves to nourish them. They are expelled in a ball (peloton) with the fæces, or escape by themselves, causing intolerable itching, tenesmus, and other annoyances.

Injections of sulphate of quinia, repeated every evening for a certain time, are capable of completely destroying these entozoa.

I had twice an opportunity of administering sulphate of quinia for tænia, and in both cases the worm was expelled and was not reproduced. The first case occurred in October, 1855, and was that of a widow, aged 28, who had suffered for many years from a tænia of which she was constantly passing one or more segments. Every known anthelmintic had been administered without completely freeing her from her malady. After having taken about forty-six grains of sulphate of quinia, she voided several yards of a tænia, the characters of which corresponded with those of the bothriocephalus latus. The medicine was continued for some time, and she has ever since enjoyed good health, and has had no return of the worm attacks.

The subject of the second case, dating from the month of March, 1855, was a little boy, aged four, who, according to the report of the parents, had been from the time he was one year old in the constant habit of passing entire ells of a large flat worm, which I recognized to be the tænia lata. Sulphate of quinia was exhibited, a worm twenty-nine and a half feet (nine metres) in length was expelled, since which there has been no return of the affection.

Sulphate of quinia is, therefore, truly an anthelmintic. The physician often meets debilitated sickly young children, whose constitution bears the stamp of the most profound asthenia. He generally shrinks, when these children are at the same time attacked with worm affections, from the long list of anthelmintics, which, most frequently, only act on the

digestive tube by producing violent effects, which are often felt injuriously throughout the entire system.

It is in such cases especially that the sulphate of quinia is advantageous, and I have never seen its employment followed by unfavorable consequences. Sulphate of quinia produces its vermifuge effects in virtue of its bitter properties; for bitters, as is well known, act more energetically as poisons on animals, in proportion as the latter are lower in the scale of creation.

Is it not on account of their bitter properties that Celsus and Cælius Aurelianus extol worm-wood and centaury as anthelmintics, and that Riviere (Praxis Medica, Book v. chap. 9,) praises the same and other plants as vermifuges, and as especially efficacious in removing lumbricoid ascarides? Kluyskens, in his treatise on "Materia Medica and Therapeutics," says that "bitters a:e very detrimental to worms." "It is a very curious fact," observes this writer, "that vegetable bitters should in general be so destructive to inferior animals; flies perish almost immediately on being wet with an infusion of quassia."

It is, therefore, not impossible that sulphate of quinia should be capable of killing intestinal worms. Moreover, by its tonic action, it restores the power of the digestive organs, debility of which strongly predisposes to the production of entozoa.

Doses and Mode of Administration.—The dose of the sulphate must vary according to the age of the patient; from two to ten years it will range between three and six grains; in older persons, so much as nine grains may be given in the twenty-four hours. When the medicine has produced the desired effect, the dose ought to be gradually diminished. During its administration the diet should be light. It is seldom necessary to have recourse to aperients; it may, however, occasionally be advisable to administer castor-oil or syrup of rhubarb. The following formulæ for its exhibition have been employed:—*Powders.*—Sulphate of quinia, half a scruple; sugar, as much as may be sufficient; divide into six powders. *Pills.*—Sulphate of quinia, half a scruple; honey, marshmallow powder, of each as much as sufficient; make into six pills. *Electuary.*—Sulphate of quinia, from three to six grains; purified honey, two ounces; mix; a teaspoonful to be taken frequently. *Syrup.*—Sulphate of quinia, from three to five grains; syrup of orangepeel, ten drachms; a teaspoonful to be taken at a time, and frequently repeated. *Enema.*—Sulphate of quinia, five or six grains; dilute sulphuric acid, as much as may be sufficient; distilled water, eight ounces.—*Presse Medicale Belge*, April 15, 1855, p. 125.

On the In-Growing Toe-Nail.

[To the Editor of the Medical Times and Gazette.]

Sir,—I have, in the last year or two, read so many letters in the *Medical Times*, and other journals, on the subject of "the ingrowing toe-nail," proposing a variety of painful operative procedures, such as removal of part of the nail, cutting off the overhanging edge of skin, cauterizing the fungous growth, as it is called, etc.; and I have seen so many patients who have suffered under this troublesome complaint for

months, and even years, in spite of their having been subjected to much torture, under the hands of good, even most eminent Surgeons, that I think it right to bring before your readers a simple and effectual remedy. It is nothing more than a piece of silver, rolled out sufficiently thin to admit of being bent to the required shape, yet sufficiently firm to bear moderate pressure. This should be nearly the length of the nail, from a quarter to half-an-inch wide, and bent into somewhat of an S shape, or rather thus,

. The lower end (*b*) is, with the aid of a pair of forceps, to be carried down between the overhanging ulcerated skin and the nail, and hooked under the rough edge of the latter. The upper end (*a*) is then carried outwards, and secured in that position by a strip of plaster, and a bandage round the toe. By this means, the inverted edge of the nail and the skin are effectually kept from one another, and pressed in opposite directions. The nail, is a little elevated, and the "fungous growth" very soon shrinks under the pressure of the metal, and assumes a healing aspect. Often, when the silver is well adjusted, the patient is able to walk about with comparative ease immediately afterwards. I do not interfere with it for several days, when a marked improvement is usually found to have taken place. The silver is readjusted with greater ease, and allowed to remain a longer time. Gradually the ulcer heals, and the nail grows up in more natural shape and appearance. It is well, however, to continue the use of the silver for some time; and, after the sore has quite healed, it is well to insert a piece of lint, or a small flat piece of silver, under the edge of the nail, to prevent the tender cicatrix being fretted by it, and to keep down the skin. The patient should be directed to avoid tight shoes, and not to cut the corner of the nail low down. In some bad cases, it has been necessary to keep the patient quiet, or in bed, for a short time; and, in a few, to prepare the way for the silver by the introduction of a piece of lint, secured by a strip of plaster.

There may be nothing novel in the plan here recommended, but it certainly is not known and adopted so generally as it deserves to be. It suggested itself to me when reflecting upon the nature and causes of the complaint, and endeavoring to find some better means of treatment for this very painful and annoying malady than those I had seen employed, feeling certain that the removal of the side of the nail, or any portion of it, which is usually done, must be wrong, for the simple reason that the skin soon occupies the vacancy so caused, and is most likely to be again fretted by the nail growing up into its former place. Since I adopted the above plan, some years age, I have found little difficulty in the treatment of these cases, have instructed some patients to carry our their own cure, and have not failed in a single instance. The size and exact shape of the piece of silver must, of course, be regulated according to the case, and a little nicety of manipulation is required to insinuate it between the ulcerating skin and the nail, and hook it under the edge of the latter, without inflicting much pain in the exquisitely tender state of the part.

I am, etc. G. M. Humphry.

Cambridge, June 27, 1855.

Abstract of Meteorological Observations for June, 1855, made at Philadelphia, Pa. Latitude 39° 57′ 28″ N., Longitude 75° 10′ 40″ W. from Greenwich. By PROF. JAMES A. KIRKPATRICK.

1855. June.	BAROMETER. Daily Mean	BAROMETER. Mean Daily Range.	THERMOM. Daily Mean	THERMOM. Mean Daily Range	Dew Point 2 P.M.	Force of Vapor 2 P.M.	Rel. Humid. 2 P.M.	Rain.	Prevailing Winds.	Remarks.
	Inches.	Inches.	Deg.	Deg.	Deg.	Inches.	Hunds.	Inch.	Points.	
1	29.809	.235	70.3	3.2	62.6	.568	.67	1.600	SSE.	*Rain* all day.
2	29.657	.152	66.3	4.0	64.8	.613	.90		SSE.	*Rain* all day. [with th'der.
3	29.610	.047	66.7	3.7	62.6	.568	.67	1.237	SE.	Cl'y; aft. & night heavy *Rain*
4	29.659	.049	62.2	4.5	50.1	.362	.55		W.	M. and aft. cloudy; ev. clear.
5	29.751	.092	65.0	2.8	47.0	.322	.44		(Var.)	Clear. [and lightning.
6	29.826	.074	68.2	3.2	46.7	.319	.36	1.160	SW.	Cl'y; *Rain* at n't, with th'der
7	29.493	.332	72.2	4.0	67.6	.675	.60	0.456	SW.	M. *R'n*; aft. cl'y; ev. *R'n*, high wind, th'r. *Bar. l'st* 29.395.
8	29.591	.176	66.0	6.2	49.9	.359	.45		W.	Aft. cloudy; m. and ev. clear.
9	29.681	.090	68.7	2.7	49.5	.354	.42		(Var.)	M. cl'r; aft. & ev. cl'dy. [l'ng.
10	29.469	.212	72.3	7.0	64.0	.597	.53	0.586	(Var.)	Cl'y; *R.* all n't; 7 to 8 P.M. th. &
11	29.571	.124	68.3	8.0	49.2	.350	.45	0.351	W.	Cloudy; *rain* during night.
12	29.810	.239	64.3	4.0	41.3	.260	.38		NW.	Clear.
13	29.945	.138	64.3	3.3	47.0	.322	.44		NW.	Clear. *Th. lowest*, 51°.
14	29.822	.122	68.8	4.5	45.6	.306	.34		WNW.	Cloudy.
15	29.657	.166	72.5	3.5	50.1	.362	.37		W.	Cloudy.
16	29.634	.022	74.3	1.8	61.0	.537	.55	0.139	(Var.)	Cl'y; ev. & n't *rain*, th. & l'ng.
17	29.772	.164	69.7	6.5	51.9	.387	.58	0.682	NE.	Cloudy; m. *rain.*
18	29.943	.171	66.3	2.5	48.0	.335	.47		ESE.	Cloudy.
19	29.833	.114	60.0	6.3	56.4	.455	.88	0.220	NE.	*Rain* all day.
20	29.696	.134	69.0	9.0	65.0	.618	.76		(Var.)	M. and aft. cloudy; ev. clear.
21	29.742	.046	75.7	6.7	63.4	.585	.56		(Var.)	Clear.
22	29.644	.098	75.0	2.0	73.1	.813	.82	0.546	SSW.	Cloudy; aft. *rain*, th. & l'ng.
23	29.806	.162	77.7	2.7	67.3	.668	.61		NW.	Clear. [th'r & lightning.
24	29.723	.082	74.5	3.2	73.6	.828	.78	0.478	(Var.)	Cloudy. M. *rain*; night rain,
25	29.715	.068	76.3	4.5	69.3	.716	.77	0.553	SW.	M. *rain*; cloudy.
26	29.869	.155	79.7	4.7	66.4	.648	.59		SW.	M. and aft. cloudy; ev. clear.
27	29.957	.113	81.7	3.3	63.2	.580	.45		WSW.	Clear. *Bar. hig'st* 30.020.
28	29.886	.071	83.3	1.7	73.4	.821	.62		(Var.)	M. and aft. cloudy; ev. clear.
29	29.833	.052	88.0	4.7	73.7	.831	.51		(Var.)	Aft. cloudy; m. and ev. clear.
30	29.774	.059	88.7	1.3	77.5	.941	.61		(Var.)	M. cl'r; a. & e. cl'y; *Th. h'st* 95°
Means for June, 1855	29.739	.125	71.9	4.2	59.4	.537	.57	8.008	S. 76° W., 46–100.	
4 yrs	29.849	.103	72.2	4.3	54.8			4.250	S. 72° W., 46–100.	

The Monthly Range of the Barometer was 0.625 of an inch., and of the Thermometer 44°.